

# THE *Nation's Schools*

*February*

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*We Need More Than Salaries?*

*There's Light in West Berlin*

*Reading for the Pleasure of It*

*How to Choose Your Children*

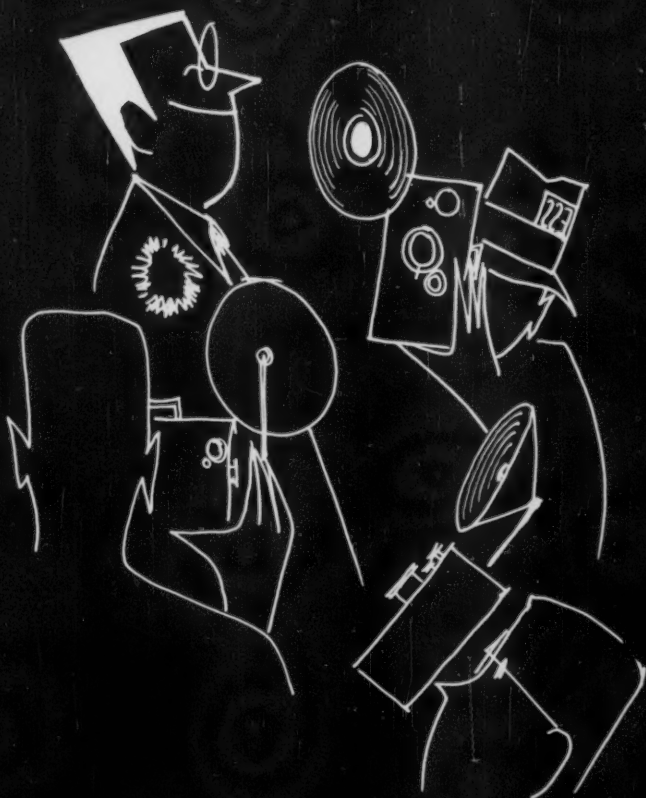
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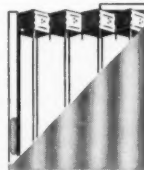
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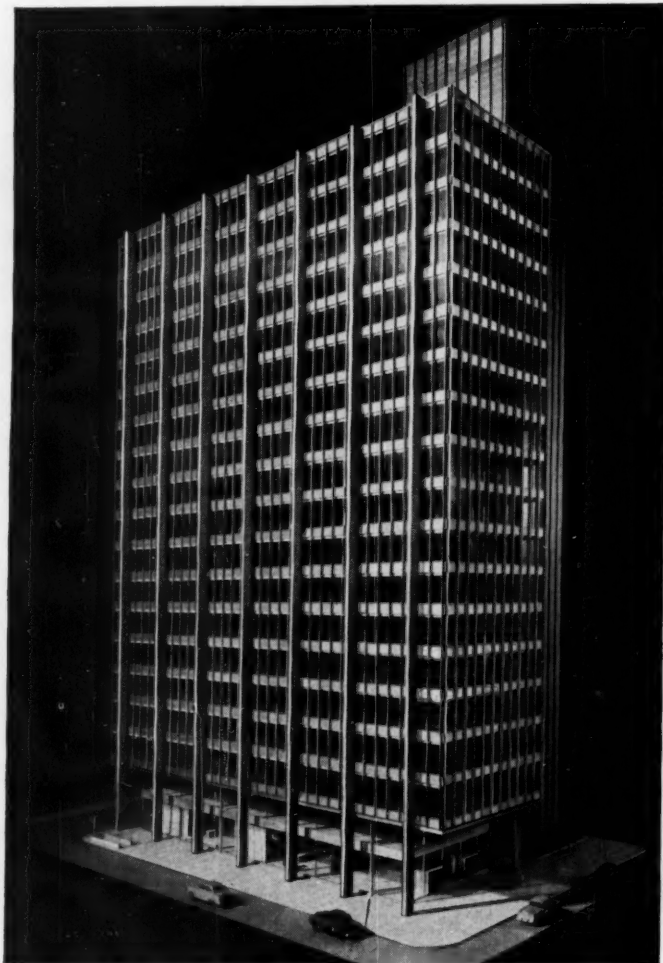
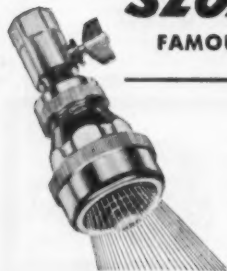


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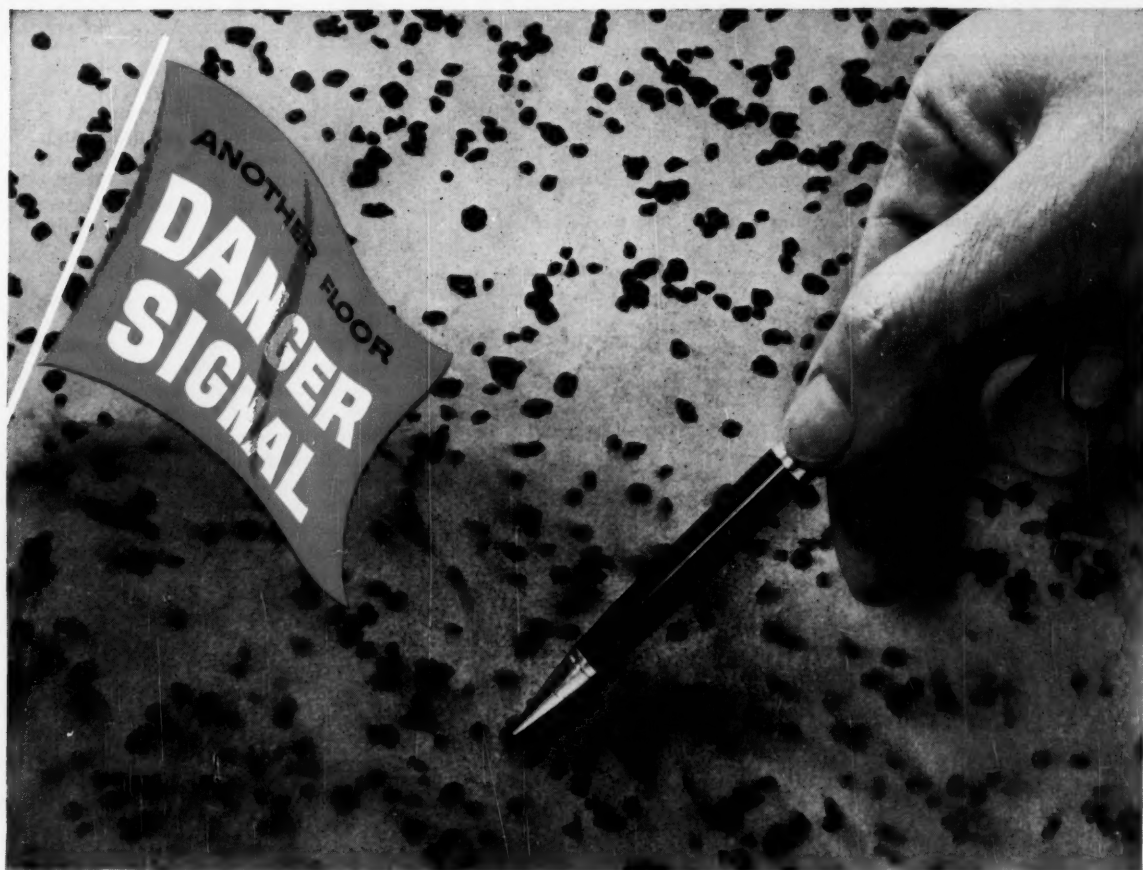
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**Observe industry's fringe benefits . . . Committees can approve summer study . . . Big schools, less participation**

By CALVIN GRIEDER, professor of school administration, University of Colorado

Fringe benefits for teachers should be studied and improved. About this time of the year decisions on salary schedules for school personnel are, in many school districts, beginning to crystallize. It is fitting that, along with salaries, other conditions of employment, commonly known in business and industry as fringe benefits, also be considered.

More emphasis is placed on fringe benefits in private enterprise than in public employment. It is not uncommon to find fringe benefit packages ranging from 15 to 20 per cent of the payroll. In the first nine months of 1957, 400 major agreements between labor and management were concluded; 96 per cent provide for wage increases while 75 per cent provide for increases in fringe benefits. The most frequent fringe increases (in 40 per cent of the agreements) are health and welfare benefits.

Although we do not hear so much about fringe benefits in education, the situation is not entirely bad. State-wide retirement plans for teachers are in effect in every state, and about half the state school systems now make federal social security available to school employees. Vacation provisions and holidays are more liberal for teachers than for any other occupational group. Sick leave provisions are almost universal; maternity leave is available in more than half the city school systems. Permanent or continuing tenure laws afford job security in more than half the states.

These features help make teaching attractive even though they all need improvement or extension. Retirement benefits are, in general, inadequate. Sick leave is not liberal enough in most school systems in spite of the fact that research has shown that teachers do not abuse liberal sick leave provisions. The long summer vacation is an economic liability for many of them.

Various kinds of insurance protection are rarely paid for by school districts (except workmen's compensation), whereas they are commonplace in private employment.

Other kinds of fringe benefits for teachers should be studied, in addition to improving and extending those already mentioned. Two important types that are rather peculiar to teaching are sabbatical or long leaves for further professional study, and provision for enrollment in summer school at district expense. Many school systems grant sabbatical or other long leaves—a semester or a year—for advanced study, but less than one-fifth grant any pay during leave. This makes it financially impossible for teachers to take advantage of the leave policy. The payment of full or partial expense for summer school attendance or summer workshops sponsored by the school district is a growing practice that should be fostered.

A noon hour free of responsibility for supervision of pupils is one of the most sought after "fringe benefits." A coffee break, again commonplace in private employment, helps make for job satisfaction. Clean and comfortable restrooms or lounges for men teachers and for women teachers should be provided in every schoolhouse. Workrooms with typewriters and desk space are much appreciated. The employment of clerical assistants or teacher aides, even as few as one or two for every 10 to 20 teachers, can relieve teachers of a great deal of more or less routine activities.

For the nonteaching corps, the extension and improvement of retirement plans and other forms of protection are probably the most important area of fringe benefits. In addition, consideration should be given to appropriate plans for district sponsored inservice improvement programs, such as short courses for custodians, conferences for food service workers, and so on. Other items along the line of those mentioned for teachers may also be adapted to the nonteaching group, such as sick leave and maternity leave.

**How much administrative approval for teachers' studies?** Should teachers be required to get administrative approval of summer study, travel or work plans?

The answer depends on the situation. If for any reason college credit, travel or work experience is to be counted as inservice professional growth, requiring prior approval is reasonable. Or if school district funds are made available, approval is certainly called for. For a social studies teacher to enroll in horseback riding and swimming for inservice points does not seem legitimate.

I should qualify my reference to administrative approval by suggesting that a better way would be approval by a personnel committee representing both teaching and administrative personnel. Guided by carefully formulated policies, such a committee, acting on written applications submitted on a standard form, could be relied on for fair and impartial recommendations to the board of education.

Some teachers resent having to get approval of their summer activities. They can have no sound objections against it, however, if they wish to receive credit for inservice improvement or if grants are made from district funds.

**Large high schools, universities offer less opportunity for extracurricular participation.** Eloquent and persuasive arguments are going the rounds in higher education of late, glorifying the advantages of large universities in comparison with small institutions of higher education. By large universities are meant those with 15,000 or 20,000 students or more. (Before World War II an enrollment of five or six thousand was large; that's little more than a country college now.)

The chief claims of superiority relate to teaching staff, research, library, laboratories, financial economy, and more value for the money spent. These advantages, except for research, may also be attributed to lower schools, and I will not be surprised if some articles along this line appear soon in professional journals.

There is one serious weakness, however, in large universities and large high schools alike: They do not afford nearly so much opportunity as do small units for student participation in worth-while extracurricular activities.

There is one varsity team for each major sport; one marching band; one concert band; one senior play; one junior play; one school paper; one yearbook, and so on. The difference in the proportions of students who can participate in such undertakings in large and small institutions is pretty large. In a university of 15,000, a band of 120 players is less than 1 per cent of the enrollment. In a college of 1200 a band of, say, 80 players, involves more than 6 per cent. In high schools of 800, a band



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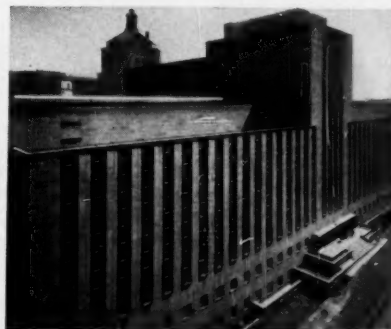
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of 80 is not uncommon; in a school of 3000 the band would be somewhat larger in size but would include a smaller percentage of students.

In all large schools and colleges, efforts are made to foster extensive intramural athletics, to mention one major activity as an example. These efforts signify good intentions, but the results do not encourage optimism. Large universities spend 50 times as much for varsity athletics involving a few hundred students as they do for intramurals for thousands.

In other areas there are severe limitations also on the number of activi-

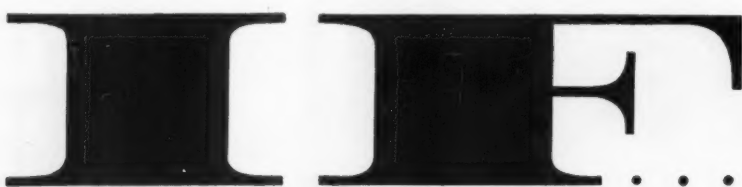
ties made available to students. Plays, publications, musical organizations and productions are too few to allow for widespread participation.

Years ago Herbert E. Hawke, dean of Columbia College, is reported to have been put under pressure to allow enrollment to rise indefinitely beyond the 2400 ceiling in force. He refused but agreed to set up as many units of 2400 as the governing board desired.

This idea is quite applicable to the problem of student participation in large institutions. If more bands, plays, athletic teams, publications and other extracurricular outlets were provided

as enrollment increased, a serious limitation inherent in bigness would be removed. That this will be done on a large scale is doubtful. In both schools and colleges commercialization has submerged educational values.

Here and there one finds laudable efforts to do it. At Blue Island Community High School in Illinois, for instance, each of the four grades is organized under a principal and is run as a school within a school. This multiplies the opportunities for participation compared with what they would be in one monolithic school. #



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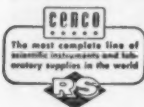
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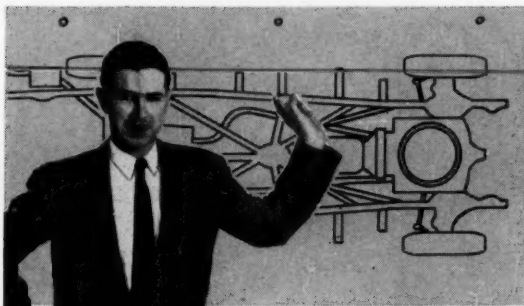
## BOOK REVIEWS

PARKINSON'S LAW. By C. Northcote Parkinson. Pp. 113. Boston: Houghton Mifflin Company, 1957. Price \$3.

Beset on all sides by such natural hazards as directors, committees, annual meetings, budgets, subordinates, plans, incompetence, ambition and advancing age, the administrator in all logic should be a vanishing phenomenon in our society, and yet the astonishing fact is that his number keeps increasing and his influence growing.

The truth of these propositions is demonstrated in an inflexible law, *Work expands so as to fill the time available for its completion*, whose discoverer, Professor C. Northcote Parkinson, may easily go down in history as a benefactor of mankind at least the equal of William Harvey. As a matter of fact, another of Professor Parkinson's observations closely parallels Harvey's discovery of the circulating blood. Administrative paper, Parkinson found, remains in constant circulation and, like the blood, is constantly renewed. "The lapse of time between the receipt of a letter and its being dealt with, or, to be more exact, the time it takes for a file to rise from the bottom of the in-tray to the top of the pile," is standard for any organization or department, Professor Parkinson reveals.

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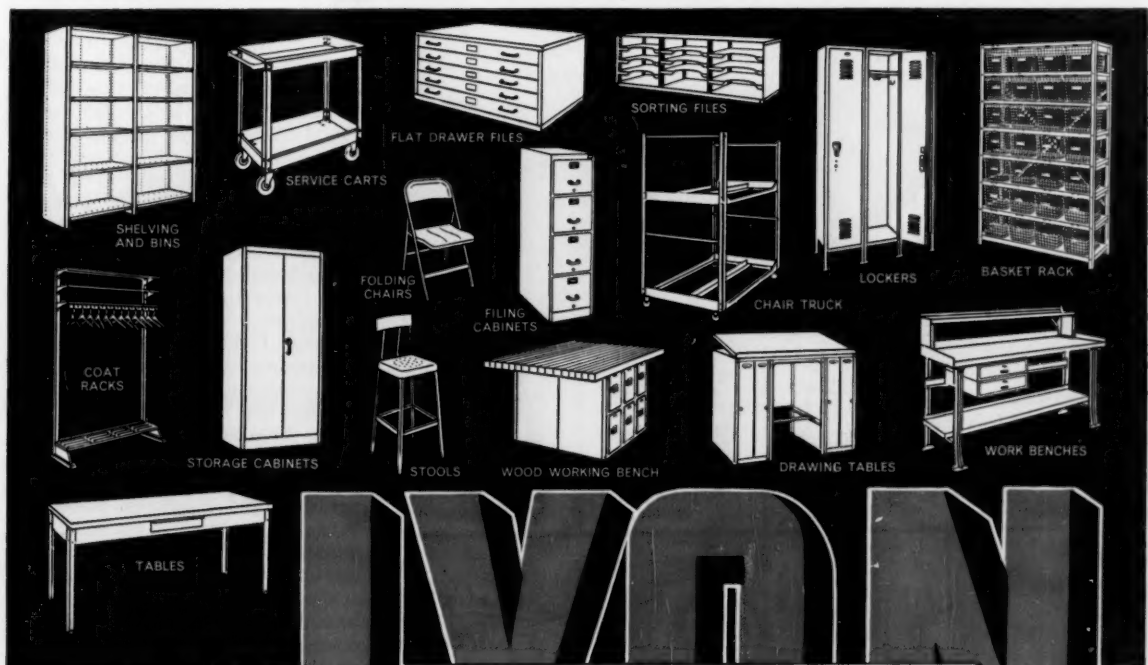
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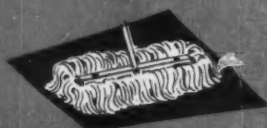


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\* For consultation on your specific dust problem and a free demonstration by a Velva-Sheen Dust Control specialist, just... write, wire or call

**THE MAJESTIC WAX COMPANY • Denver, Colorado**

Representatives and Jobbers Throughout U.S. and Canada

equally for the largest and the smallest sums."

With the scientist's precision, Professor Parkinson has also analyzed such familiar administrative problems as the size of a committee in relation to its effectiveness, or the "coefficient of inefficiency"; the annual meeting; selection of candidates for executive appointments; plants and headquarters buildings ("It is now known that perfection of planned layout is achieved only by institutions on the point of collapse"); cocktail parties; "injelitis," or the combination of incompetence and jealousy which is responsible for most organization failures, and retirement ("What are we ourselves to do when nearing the retirement age we have fixed for others? It will be obvious at once that our own case is entirely different from any other case we have so far considered. We do not claim to be outstanding in any way, but it just so happens that there is no possible successor in sight . . .").

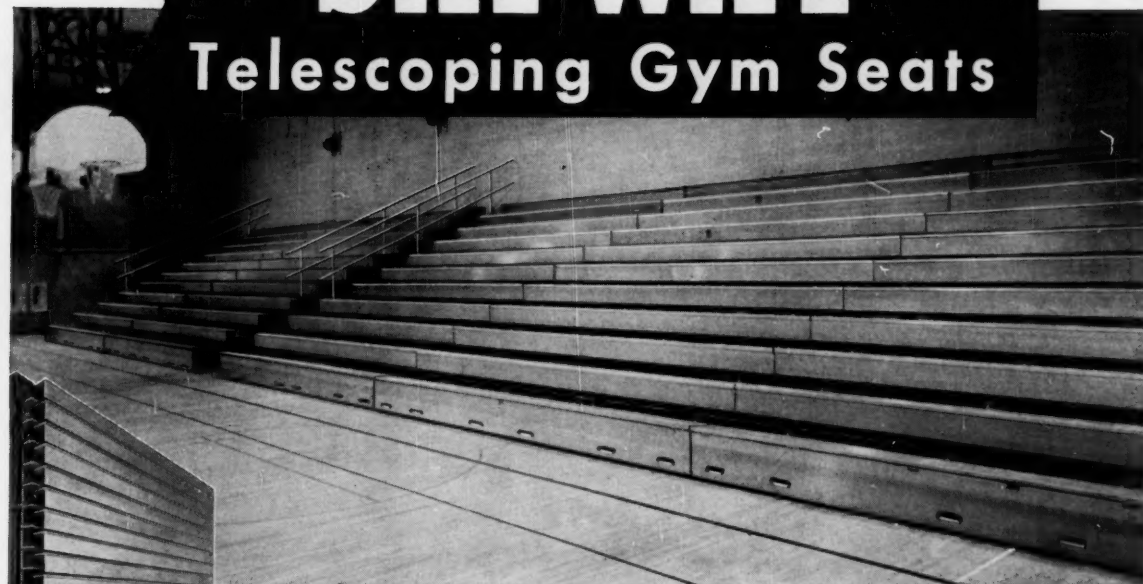
For most administrators, however, the most useful of Professor Parkinson's conclusions, and the most rewarding chapter in his book, is "Parkinson's Law" describing the irreversible expansion of administrative activity: "The fact is that the number of officials and the quantity of work are not related to each other at all." The observations from which this principle eventually emerged were made when Professor Parkinson (now professor of history at the University of Malaya, in Singapore) was an official in the War Office in London during World War II, and the chapter on Parkinson's Law in the present book first appeared as an essay in the London *Economist*. (Through a regrettable error, parts of this essay appeared in *The Nation's Schools* last November and were incorrectly attributed to John Gorby.)

Studying British Admiralty statistics, Professor Parkinson noted that during the disarmament years, capital ships in commission were reduced by 67 per cent and officers and men in the Royal Navy by 31 per cent, yet over the same period the number of dockyard officials and clerks increased 40 per cent and Admiralty officials at Whitehall increased 78 per cent. "Vast masses of statistical evidence have been collected, and it is from a study of these data that Parkinson's Law has been deduced," he reported. "The discovery of this formula and of the general principles upon which it is based has, of course, no political value. No attempt has been made to inquire whether departments *ought* to grow in size. It is not the business of the botanist to eradicate the weeds. Enough for him if he can tell us just how fast they grow."

#

# SAFWAY

## Telescoping Gym Seats



... a profitable and safe investment for your school

**YOU'LL GET** profitable *full-time use* from your gymnasium—planned or existing—when you install Safway telescoping bleachers.

With the seats extended over the floor, you provide superior vision and comfort for spectator events such as basketball. Nest the seats back into their "cabinet" and you instantly clear the floor for daily gym work.

And with only one or several rows locked open, you can set up convenient sideline seating for athletic practice, dancing parties or other gym floor activities.

Safway's advanced gym seat design also gives you these important benefits:

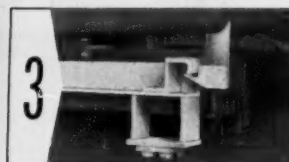
### SAFE AUTOMATIC LOCKING

Safway's exclusive gravity latch automatically locks each row in relation to every other row (see three photos below).

(1) **LOCKING OPEN.** As each row is extended, latch drops behind lock bar on carriage ahead to prevent movement between rows.

(2) **RELEASING LATCH.** After unlocking the cylinder lock, pushing seats inward forces tapered end of latch against unlocking bar, raising notched front end and freeing row ahead.

(3) **LOCKING SHUT.** With all rows nested, brake pads are lowered and hooks engage brackets on unlocking bar.



**STRONG, SAFE CONSTRUCTION**—8 steel columns under every row; uniform load distribution through vertical and horizontal steel bracing; 3 automatic locking devices.

**SIMPLE, EFFICIENT DESIGN**—Minimum of moving parts. Stable support with extra-long wheel carriages and 8 self-lubricating wheels under each row.

**SMOOTH, EASY OPERATION**—Minimum metal-to-metal friction. No costly power equipment needed.

**HANDSOME, FURNITURE-LIKE APPEARANCE**—Seat and foot boards have rich, glossy Golden Oak finish.

### Ask for engineering help!

Submit your seating requirements for recommendations by experienced Safway engineers. There is no charge for this service. And write today for your free copy of the new Catalog 162.



# SAFWAY

STEEL PRODUCTS, INC.

6232 W. State St., Milwaukee 13, Wis.



CHAIR



DESK



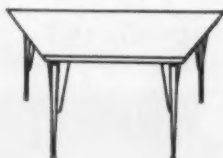
CHAIR DESK



TEACHER'S DESK



ARM CHAIR



All Purpose  
TABLES

A COMPLETE LINE OF MODERN SCHOOL FURNITURE  
DESIGNED FOR EXTRA SAFETY AND COMFORT



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DURABLE  
MODERN  
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SCHOLARCRAFT's entire line of top quality, modern school furniture has won widespread acceptance from architects, school officials, teachers and students throughout the nation. Created to meet the demand for a durable, functional and completely modern line of school furniture, SCHOLARCRAFT is unsurpassed in excellence of materials, in skillful craftsmanship, and in beauty and styling. This premier line of tapered steel and wood furniture has introduced many new improved construction features, *stressing safety and comfort*. The entire line is available in either metallic bronze, metallic green or chrome finishes.

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with fluorescent fixtures using

## CERTIFIED CBM BALLASTS



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**TROUBLE-FREE SERVICE . . .** for Certified CBM Ballasts provide assured ballast life . . . quiet operation . . . minimize replacements and repairs.



**MADE TO EXACTING SPECIFICATIONS** for performance by 8 leading ballast manufacturers, CBM Ballasts are checked and certified by ETL. And they're UL listed, also.



**NO POWER FACTOR PENALTY** on lighting bills because Certified CBM Ballasts are High Power Factor. (Saves on installation costs, too!)



**WRITE FOR FREE BOOKLET**

"Why High Power Factor Ballasts cut your lighting costs"



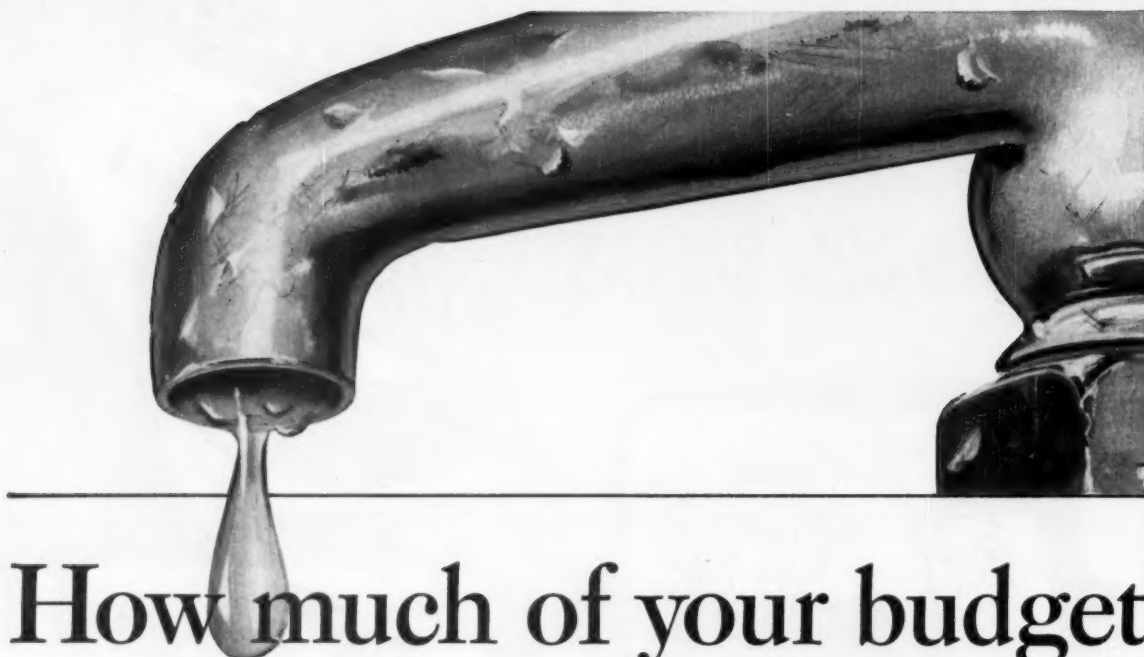
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**CERTIFIED BALLAST MANUFACTURERS**

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Participation in CBM is open to any manufacturer who wishes to qualify

CBM-6-CU



# How much of your budget drips down the drain?

*More than you might think—unless you have Crane Dial-ese controls, designed to cut down water loss and water heating bills*

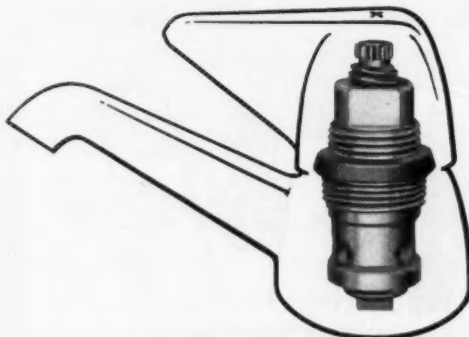
A drop of water a second, hour after hour, adds up to 2,300 gallons a year.

Multiply that by the number of faucets in your building, and you can see the incredible water waste that dripping can, and *does*, cause. And when it's hot water, there's a big fuel waste, too!

Crane Dial-ese controls are designed to stop this constant waste. For one thing, a Dial-ese control shuts off easier and all the way because it closes *with* the water pressure—not against it.

Dial-ese is designed to last longer, too. Stem threads are permanently lubricated at the factory—and sealed *inside* where water can't touch them. All working parts are in a single, simple cartridge that screws into the faucet. *Replacement is quick and easy*—just take out the old, put in the new.

All Crane fixtures (and *only* Crane fixtures) feature Dial-ese controls. Why not ask your architect for more details before you build or remodel?



**CRANE DIAL-ESE PERMITS STANDARDIZATION.**  
The same renewable unit fits all Dial-ese controls... lavatories, bathtubs, showers, sinks and laundry tubs.

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PLUMBING

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Everybody is happier when architects specify ALWINTITE aluminum windows. Well designed and carefully made by General Bronze—recognized leader in aluminum windows—they offer many PLUS VALUES. To hospital or school building committees, to realty managers and to building owners, their fine workmanship, easy trouble-free operation, low-cost maintenance and attractive appearance, are all evidence of their superior quality. Architects, too, appreciate such other PLUS VALUES as wide selection from stock sizes, dependable on-time deliveries and reliable distributors with factory-trained window specialists always at your service. For the complete story—types, sizes and details—see the ALWINTITE catalog in Sweet's, or write us direct.

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by **GENERAL BRONZE**  
GARDEN CITY, N.Y.

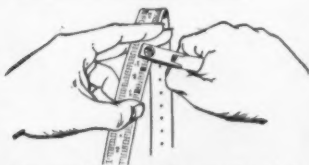
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ALUMINUM WINDOWS • SLIDING DOORS



# Only the new **STANDARD** master clock and program controller offers...

## MEMORY TAPE CONTROL



The modern, positive method of controlling program signals—automatically. Provides complete freedom for special programming (including night classes) because it permits ringing bells on any circuit an unlimited number of times—at intervals as short as one minute.

## EASY PROGRAM CHANGING



Punch the Memory Tape at specific times that signals are to sound. Slip it on the drum. That's all! No time-consuming fumbling. No parts to take out. No intricate mechanisms to get out of order. Tapes provided free as required.

## AUTOMATIC CONTROL & RESET

Master Clock is synchronous motor powered and control of all secondary clocks—including automatic resetting—is through master clock. All secondary clocks are automatically corrected either hourly or every 12 hours, as you select. During any power interruption, reserve power unit (spring wound motor mechanism) keeps Master Clock and Program Controller running for 15 hours. Result: no false signals. Bells ring on normal schedule when power is restored.

## SIMPLICITY



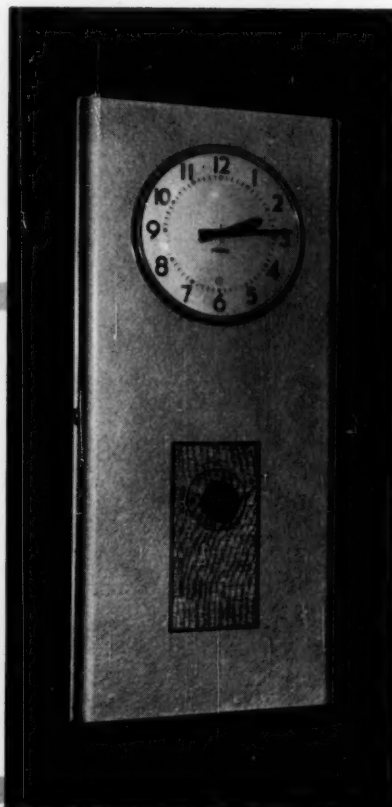
Easy, "open the door" accessibility of all operating components... sound engineering... simple, practical design proved and improved over 50 years mean low maintenance, long life.

## SAFETY



Ready access to controller with complete safety to personnel. Circuitry protected by circuit breakers. Approved by Underwriters' Laboratories.

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"MEMORY TAPE CONTROL"



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complete STAND-  
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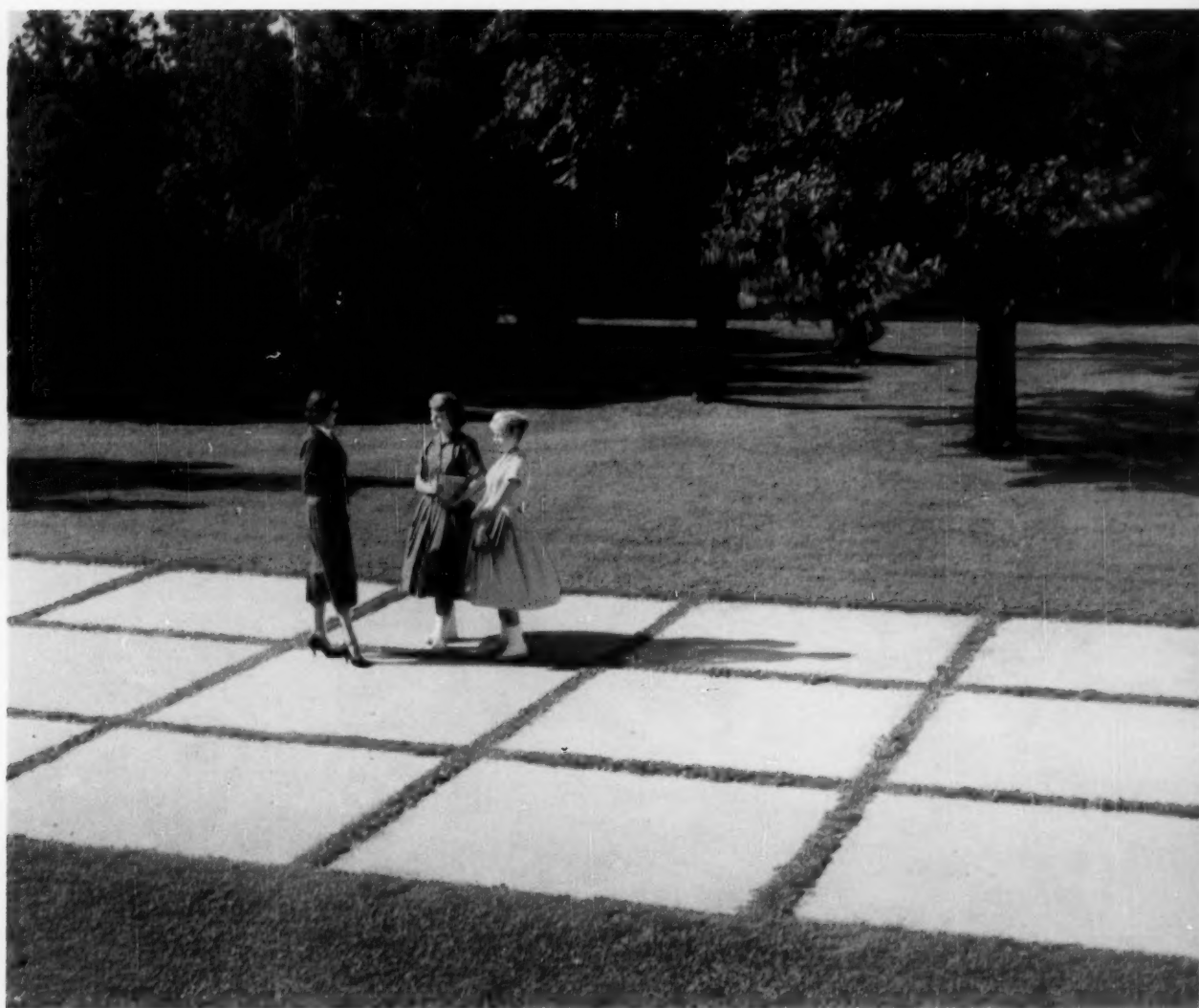


Analogue  
Computers



Precision  
Timers

IF  
CLASSES  
WERE HELD  
OUTDOORS...



Copyright 1957, American Seating Company.  
American Seating products are fully covered by  
patents and patents pending.



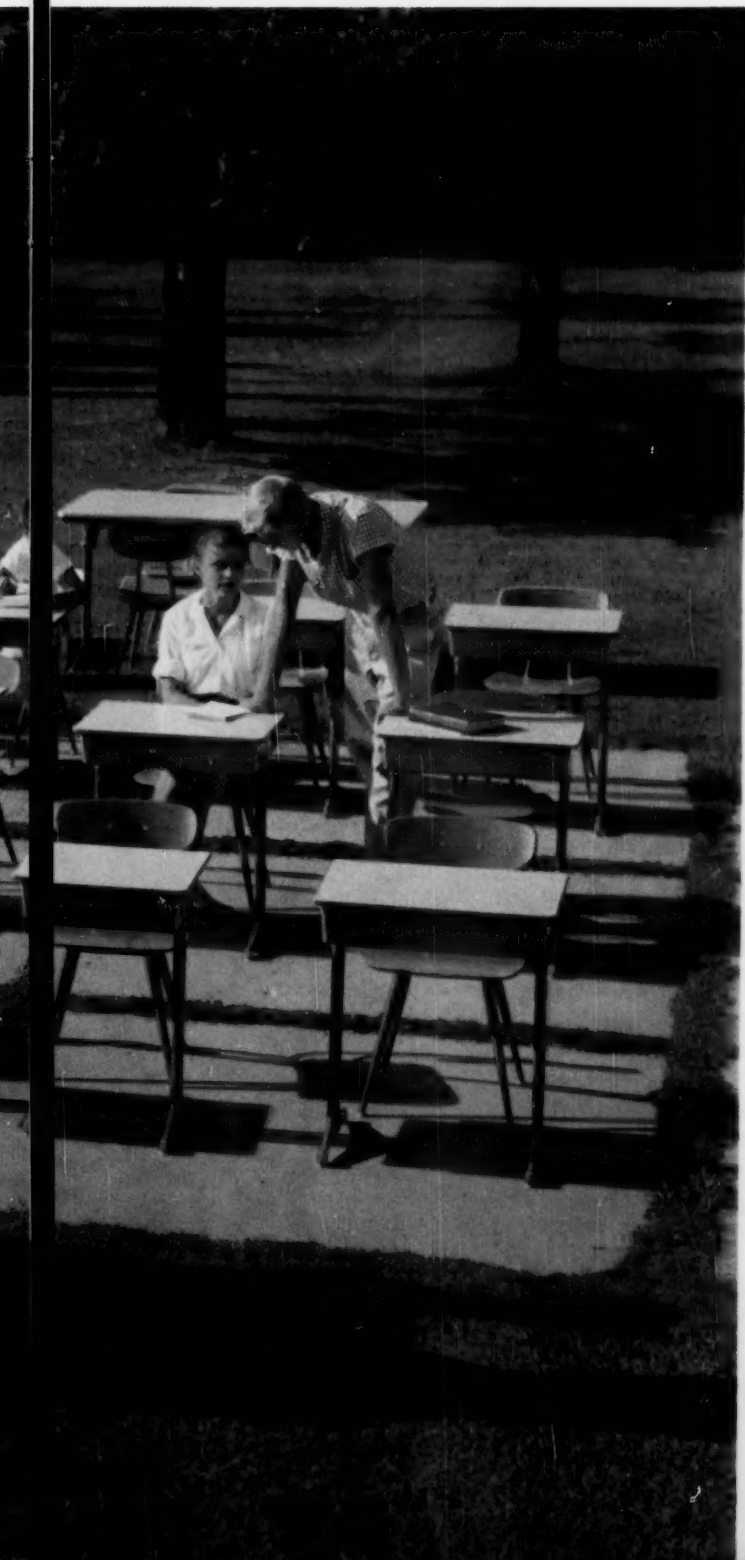
If your school furniture were "on display" every day like this . . .

You'd buy American





# Seating furniture every time!



We put this classroom outdoors to remind you how important good seating is to the students and teachers who have to use it every day.

Outdoors or indoors, however, if it's an American Seating product, two points stand out: (1) You get the greatest value per dollar invested. (2) Students and teachers alike enjoy more benefits. Because . . .

*American Seating furniture has more postural advantages and more structural features than any other school furniture. And past experience proves that it lasts longer. Consequently, American Seating furniture is the most economical furniture you can buy.*

No wonder American Seating furniture outsells every other make of school furniture.

No wonder those who buy American Seating furniture for their schools take particular pride in their purchases.

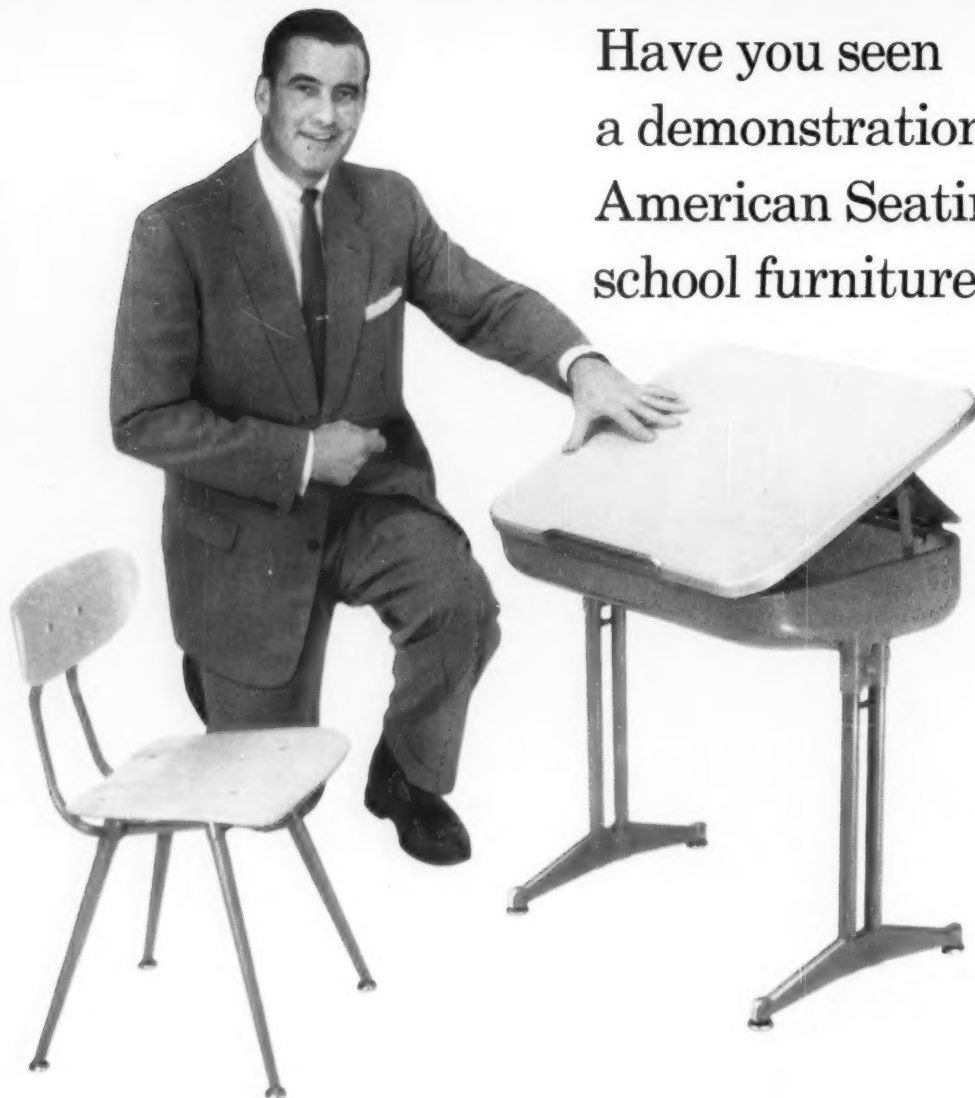
Have you seen a demonstration of American Seating fine school furniture lately? If not, let an American Seating representative give you a private showing in your own office, at your convenience. Also, let him tell you about our greatly expanded facilities, which enable us to give you the finest service ever. American Seating Company, Grand Rapids 2, Michigan.



The standard by which all other public seating is measured

CLASSMATE® SCHOOL FURNITURE • UNIVERSAL® SCHOOL FURNITURE  
ENVOY® SCHOOL FURNITURE • BODIFORM® AUDITORIUM CHAIRS  
STADIUM SEATS • CHAPEL FURNITURE • FOLDING CHAIRS AND TABLES

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● MAIL COUPON TODAY to arrange for your private demonstration.

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The standard by which all other public seating is measured

CLASSMATE® SCHOOL FURNITURE • UNIVERSAL® SCHOOL FURNITURE  
 ENVOY® SCHOOL FURNITURE • BODIFORM® AUDITORIUM CHAIRS  
 STADIUM SEATS • CHAPEL FURNITURE • FOLDING CHAIRS AND TABLES



# How to Use Hearing Tests in Your School

*This Authoritative Free Book Shows You The Way*

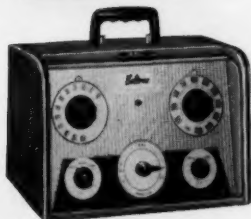


Beltone's free book shown  $\frac{2}{3}$  actual size

**Beltone Portable Audiometers —**  
Ideal for School Hearing Tests



Model 9-A Basic Audiometer for threshold hearing tests. Features exclusive one tube electronic circuit, easy-to-read, calibrated dials requiring no mathematical calculations. Portable too—only 11 lbs. Complete, ready to use, \$295.



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See Beltone Audiometers demonstrated at the 1958 Regional Conventions of the American Association of School Administrators. Check these dates:

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San Francisco: March 8 to 11, 1958  
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**"SEE BOSTON FOR BIGGER FEATURES**



**BOSTON RANGER ALL-AMERICAN**

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*specify the  
sharpener with...*  
**STEEL GEARS**



**BUY BOSTON FOR BIGGER VALUES"**

Send for comprehensive school report on care, selection and use of sharpeners.

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**PENCIL SHARPENERS**

There's safety in the shine

if there's Du Pont Ludox®  
in the floor wax

Her hurried steps across highly polished floors are *safer* steps because there's "Ludox"—Du Pont's anti-slip ingredient—in the floor wax. Tiny, *transparent* "Ludox" spheres in the wax exert a "snubbing" action on every footstep... arrest the foot's forward motion... give the foot positive traction.

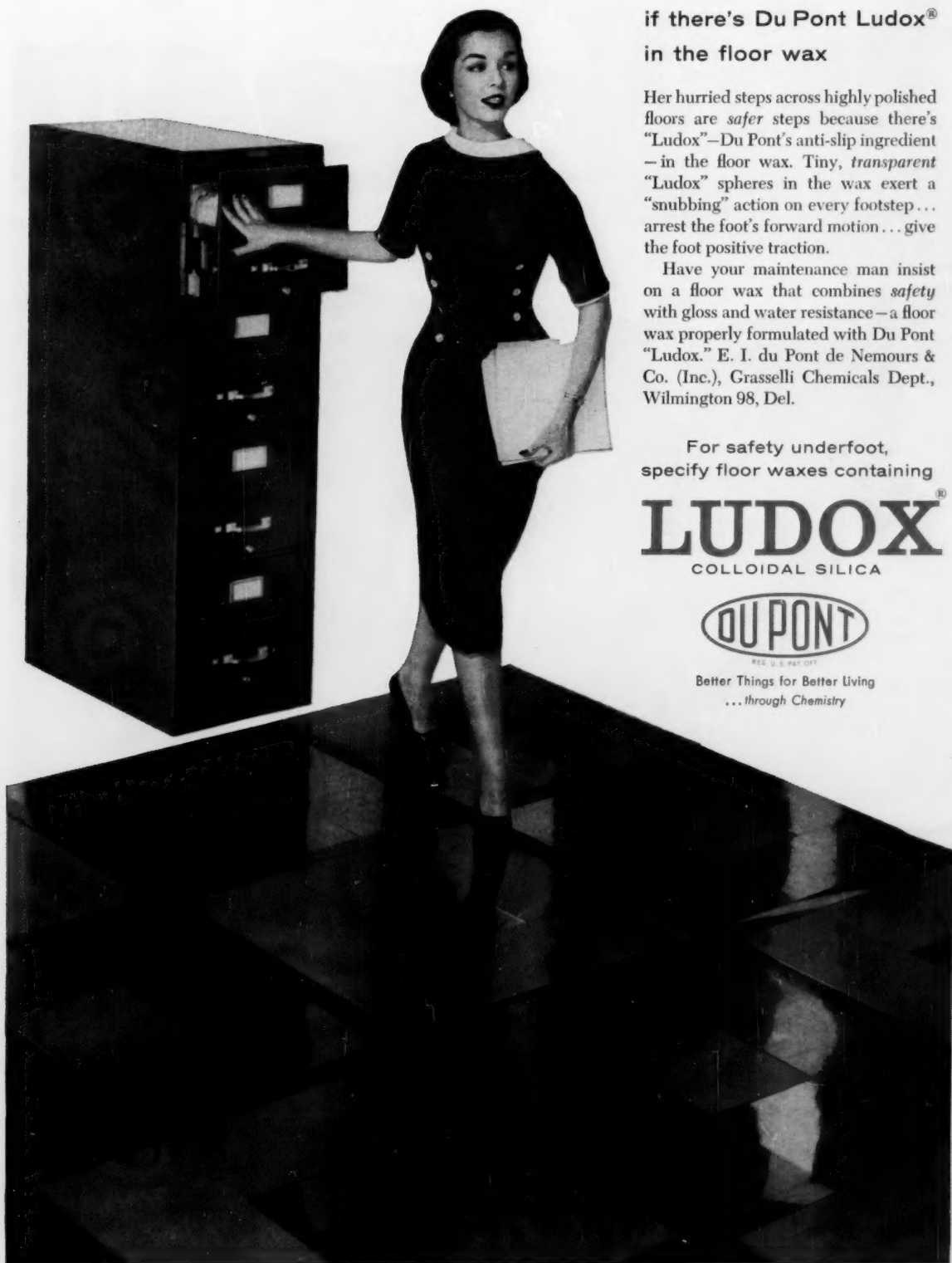
Have your maintenance man insist on a floor wax that combines *safety* with gloss and water resistance—a floor wax properly formulated with Du Pont "Ludox." E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Dept., Wilmington 98, Del.

For safety underfoot,  
specify floor waxes containing

**LUDOX**®  
COLLOIDAL SILICA



Better Things for Better Living  
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**INTERNATIONAL Schoolmaster** chassis meet or surpass school bus standards. The popular model A-183 (above) is one of five conventional chassis that mount bodies for 24 to 66 passengers. World's widest choice of models for safe, dependable, economical and comfortable pupil transportation.

**New INTERNATIONAL Forward Control models!** Transport more passengers with *less* overall length. Easier to maneuver. More convenient entry and exit. Three models with 60, 66 and 72 passenger capacity. Metro® models for up to 20 passengers.

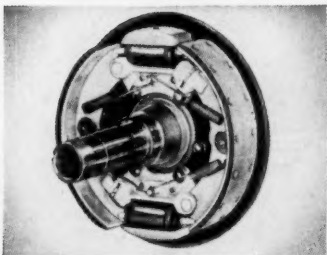


# INTERNATIONAL TRUCKS

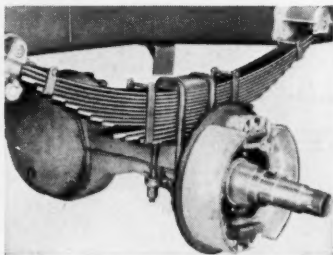


# Safe, Lasting Stops

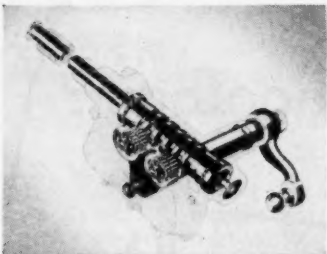
*Just one reason why schools find  
International Bus Chassis cost least to own!*



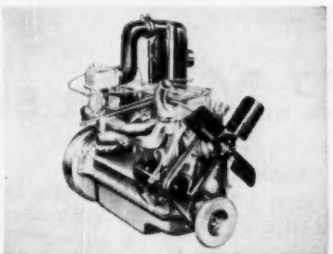
**Safe, easy stops.** Big, long-lasting hydraulic power, air-actuated hydraulic or air brakes designed for each model.



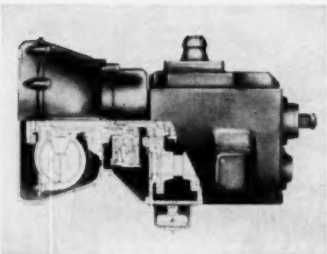
**Easy ride.** Minimum road shock or vibration with long, wide springs. Extra safe double-wrapped main leaves.



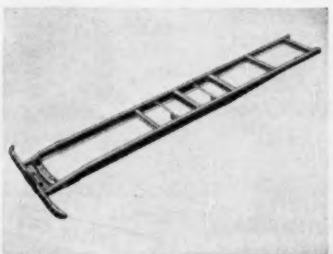
**Safer, easier handling** with forward-position steering. Maximum visibility with larger forward glass area.



**Higher usable power,** increased operating economy and more dependability. Exceed all school bus standards.



**Easier driving,** top performance and fuel economy with Select-O-Matic (above) or synchromesh transmissions.



**Extra strength and safety** is designed and built into every frame . . . meets or exceeds all school bus standards.

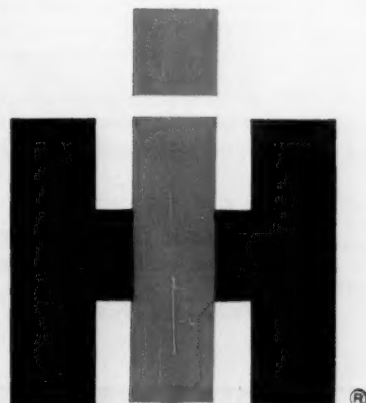
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This is typical of the safety design and long-life construction of every part on every INTERNATIONAL chassis. And when it comes to savings, remember this: cost records prove\* INTERNATIONAL Trucks cost *least* to own.

A call to your INTERNATIONAL Dealer can be the answer to all your transportation problems. Give him a ring today.

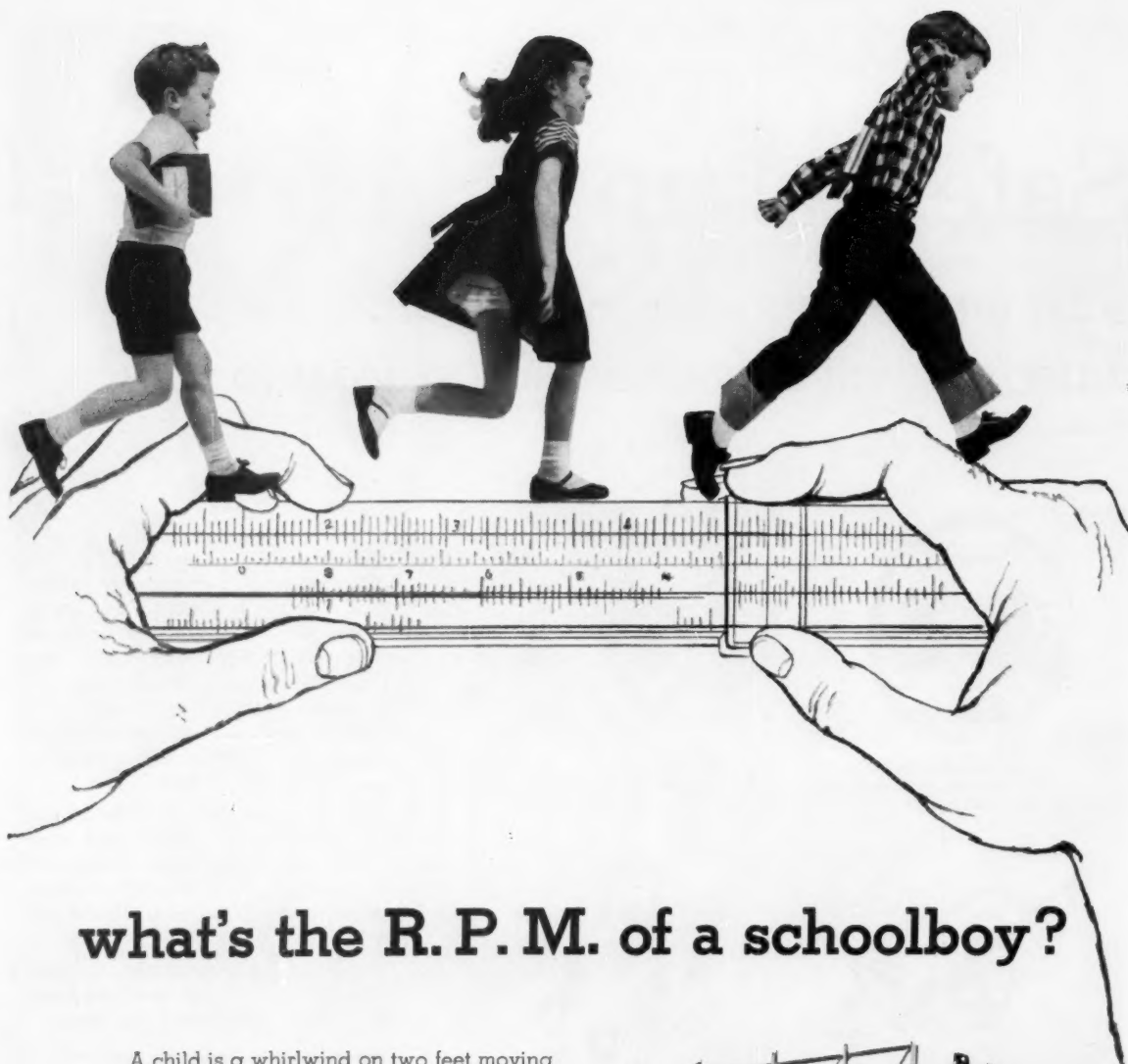
\*Signed statements in our files, from fleet operators throughout the U.S., back up this statement.

**cost least to own!**  
.....



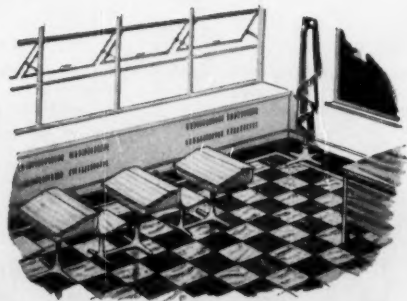
INTERNATIONAL HARVESTER COMPANY, CHICAGO

Motor Trucks • Crawler Tractors  
Construction Equipment • McCormick®  
Farm Equipment and Farmall® Tractors



## what's the R. P. M. of a schoolboy?

A child is a whirlwind on two feet moving in a manner that's incalculable . . . and constant. It takes flooring with stamina . . . colors with staying power . . . to measure up to his activities. MATICO qualifies on every count . . . stands up to heaviest traffic year after year. MATICO colors are styled to camouflage soil, to stay bright and fresh, to clean easily and resist signs of wear. Hindsight proves your foresight, when you select economical MATICO for important installations.



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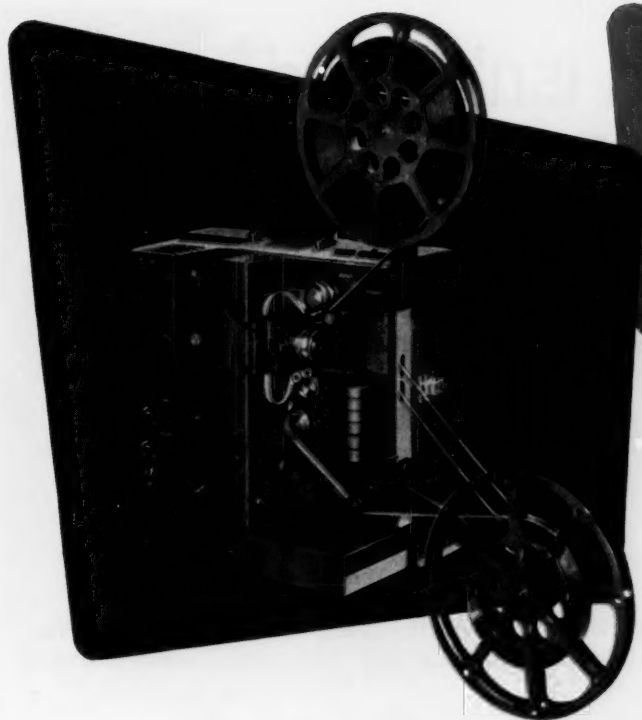


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MASTIC TILE CORP. OF AMERICA, Dept. 24-2, Box 996, Newburgh, New York  
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# NOW...

## RCA "LIFE-TESTED"\* 16mm Projectors scoop the field

### with great new design advances!

**FEATURING** great new **BUILT-IN LUBRICATION!**  
No more lubrication needed for the life of your RCA Projector. Oil-impregnated sintered metal parts run quietly as a cat hundreds and hundreds of hours.

**FEATURING** great new **LONG LIFE FILM PRESSURE GUIDES!** Nylon sprocket shoes and synthetic-sapphire pressure shoe treat film with wholly new light touch, protect it from wear at all critical contact points in film path.

**FEATURING** great new **BOOST IN LIGHT ON SCREEN!** RCA Projector is first designed for use with new 1200-watt lamp. Higher-power blower rotor moves more air to keep aperture and mechanism cooler, assuring complete film safety. Optional two-bladed shutter adds another 40% light on screen for brightest picture ever.

**FEATURING** great new **WEAR-RESISTANT CASE!** Surf-green fabric case takes more scuffing and abrasion and shows it less than any standard case in use today. It's twice as resistant to ordinary wear.

Remember these great new RCA "LIFE-TESTED" features. With them, you'll all but forget maintenance for your projectors. And of course RCA Projectors *still* thread easiest of any 16mm machine. In fact, their distinctive new surf-green finish makes for even simpler threading and operating in darkened rooms. The same superlatively clear, RCA-engineered sound is yours, too.

See and hear how far ahead of the field you'll be with the great new "LIFE-TESTED" line of RCA 16mm Projectors. Ask your RCA Audio-Visual Dealer about the powerful two-case RCA Senior, the compact RCA Junior. Their "LIFE-TESTED" features can be *yours* today!

\*Rigid endurance standards have been set for RCA "LIFE-TESTED" Projectors. Individual components as well as finished projectors are subjected to continuous testing to evaluate the durability and efficiency of all operating parts. "LIFE-TESTED" at RCA means better, more reliable performance from RCA projectors.



## RADIO CORPORATION of AMERICA

EDUCATIONAL SERVICES

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# An encyclopedia isn't good enough

...unless it is massively and continuously revised

...unless it describes the newest revolutions in science....including even Sputnik

...unless it provides accurate, concise and easily located information on every subject in every curriculum

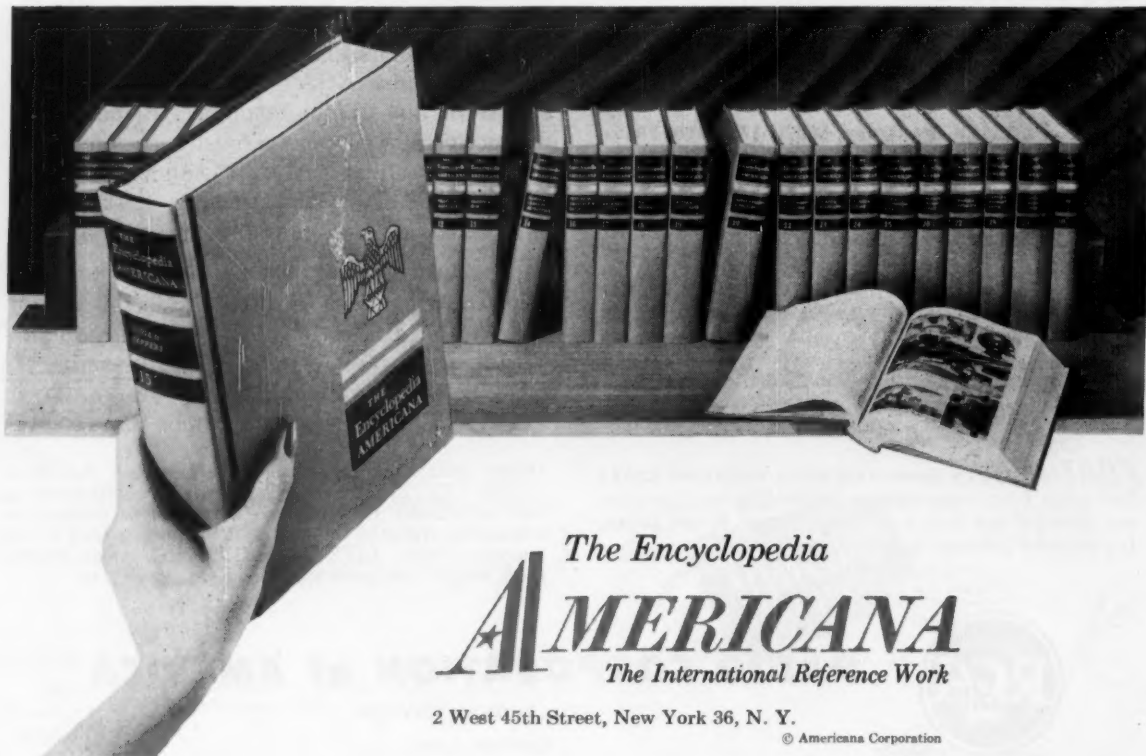
...unless it is written and edited so as to correlate reading level with the curriculum and student interests

...unless, because of its format and design, it appeals to the young reader

...unless it is replete with such reference aids as a superlative index, up-to-date bibliographies, glossaries, cross-references, aids to pronunciation and the texts of great historical documents

...unless it is endorsed by libraries and educators everywhere

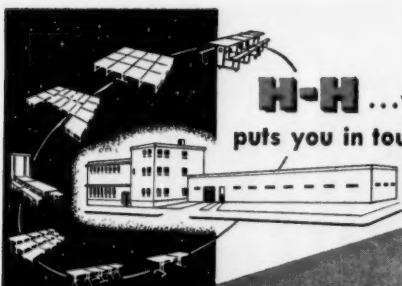
...unless, LIKE THE 1958 ENCYCLOPEDIA AMERICANA, IT MEASURES UP TO ALL THE ABOVE STANDARDS



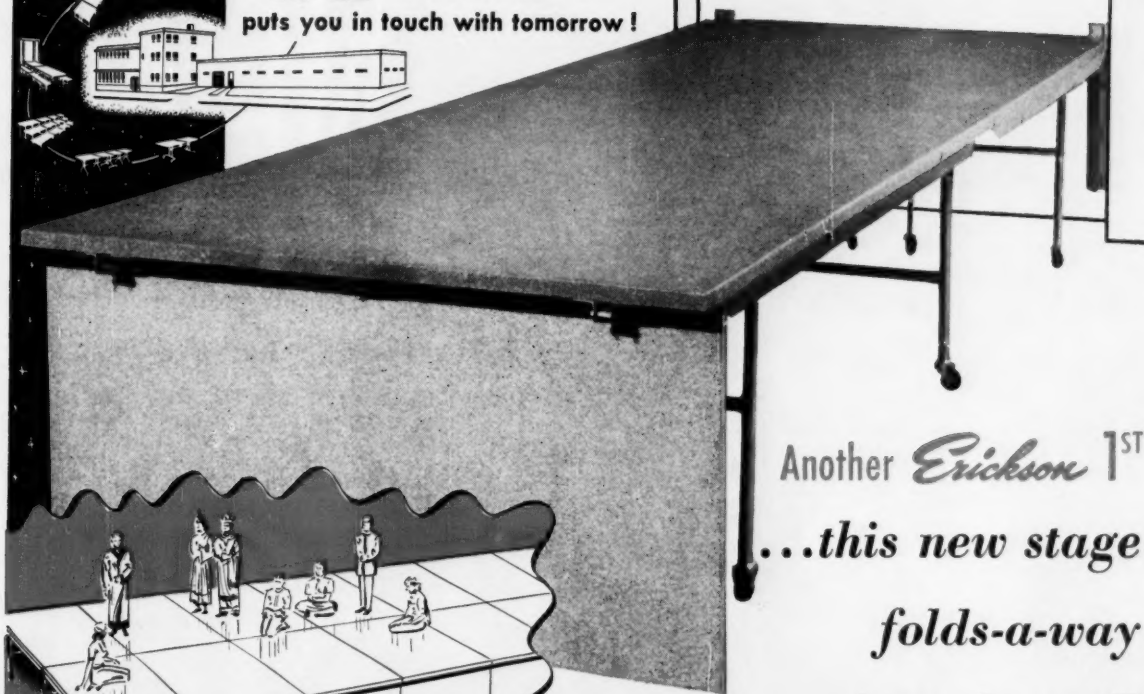
*The Encyclopedia*  
**AMERICANA**  
*The International Reference Work*

2 West 45th Street, New York 36, N. Y.  
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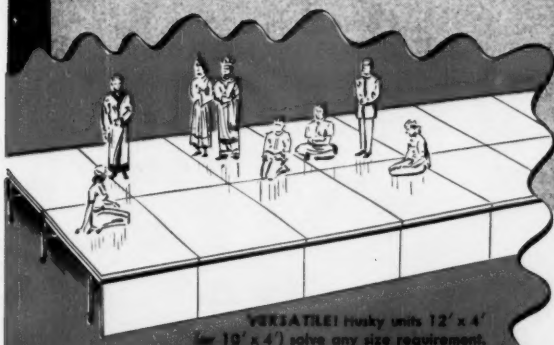




**H-H** ...where research  
puts you in touch with tomorrow!



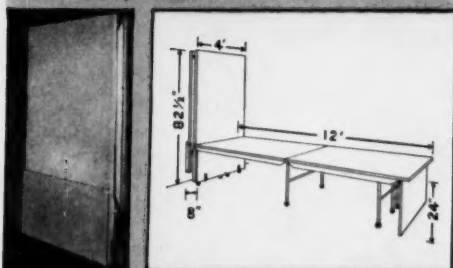
Another *Erickson* 1<sup>ST</sup>  
...this new stage  
folds-a-way  
into the wall  
out of the way!



VERSATILE! Husky units 12' x 4'  
(or 10' x 4') solve any size requirement.



**AUTOMATIC!** Each unit sets up by itself thanks to  
automatic hydraulic action!



**COMPACT!** Each unit folds-a-way into shallow recess  
only 8" deep, or may be mounted on wall. Drawing  
shows stage folded and unfolded.

*Erickson* FOLD-A-WAY PRODUCTS FOR MULTI-USE OF SPACE

**H ALDEMAN H OMME MFG. CO.**

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Gentlemen:

Please send complete information on your new Erickson  
in-wall fold-a-way stage.

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SCHOOL \_\_\_\_\_

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CITY \_\_\_\_\_ STATE \_\_\_\_\_

Mike Fischetti



# NEW!

**BAUSCH & LOMB  
STANDARD TEACHING  
MICROSCOPES**

**ONLY  
\$117!**

**\$105<sup>30</sup> each,  
in lots of five**

# STANDARD MICROSCOPE at SCHOOL BUDGET PRICE!

**Dollar for Dollar, B&L Matches the Lowest Price;  
Feature for Feature, B&L is Miles Ahead!**

- **STANDARD OPERATION** Separate coarse and fine adjustments . . . students learn correct microscopy from the start . . . nothing to unlearn later.
- **FULL STANDARD SIZE** Stable, sturdy for years of daily use. Students learn on a standard microscope, designed for comfortable, natural posture.
- **NEW FINE ADJUSTMENT** 1.5mm travel; 0.25mm tube travel per knob revolution . . . easier, more precise focus.
- **NEW 43X OBJECTIVE** Higher resolution (0.55 N.A.). Better image quality: flatter, distortion-free field; higher contrast.
- **NEW STAINLESS STEEL FOCUSING SLIDE** Less friction, less wear.
- **NEW PREFOCUSING GAGE** Faster, easier focus . . . saves instruction time, reduces damage to objectives and slides.

**SERIES ST MICROSCOPES...STANDARD TEACHING** Standard laboratory microscope stand; large stage; separate fine and coarse focusing; 10× eyepiece; double nosepiece; color-coded objectives: 10×, 0.25 N.A. and 43×, 0.55 N.A.; prefocusing gage; disc diaphragm; Optilume illuminator or mirror . . . \$117.

**SERIES STA MICROSCOPES** include intermediate models for use by students in college and nurses' training courses, and advanced models for instructors. Features include Rotosphere ball bearing nosepiece, laboratory-type objectives, and provision for mechanical stage and substage condenser . . . . . From \$158.

**See For Yourself in  
FREE DEMONSTRATION!  
Mail Coupon Today!**

**BAUSCH & LOMB**



BAUSCH & LOMB OPTICAL CO.  
68926 St. Paul St., Rochester 2, N. Y.

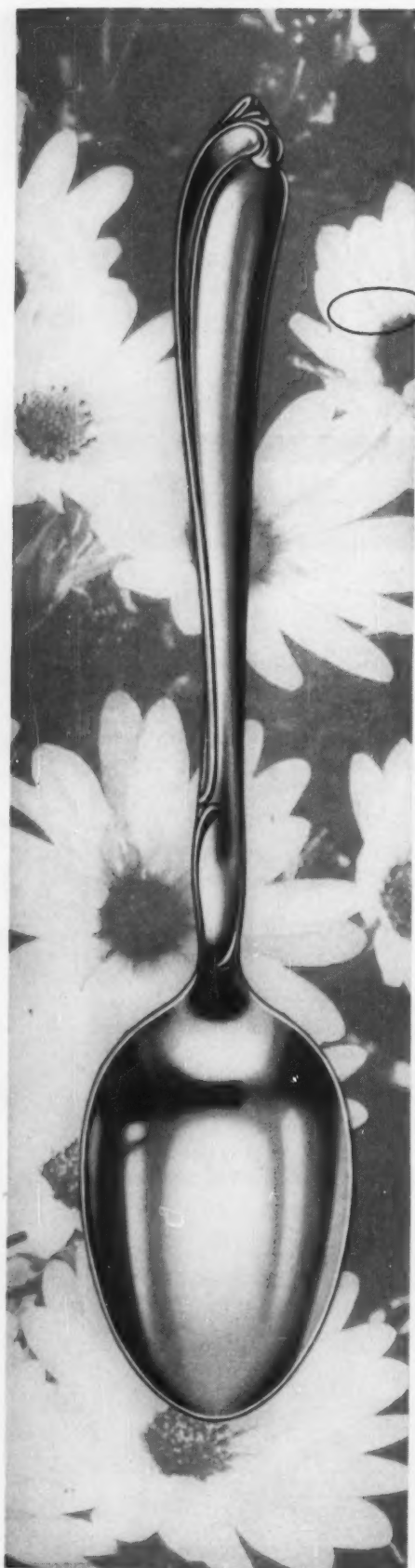
- ☐ Please schedule an obligation-free demonstration of new B&L ST Microscopes at my convenience.
- ☐ Send me informative folder D-1074.

NAME.....

TITLE.....

ADDRESS.....

CITY..... ZONE..... STATE.....



# Introducing SHASTA

IN ONEIDACRAFT\* DELUXE STAINLESS

AMERICA'S BEST-SELLING, MEDIUM-PRICED STAINLESS

HERE IS the newest addition to this family of fine hotelware. Once you see Shasta\*, you will agree it's one of the most beautiful of all patterns. Its graceful, flowing outline and scroll-tip design will grace your tables with a rich, quality look that keeps customers coming back.

You'll be pleased, too, with the durability of this distinguished stainless. Carefully graded weight with more metal at points of greatest stress helps it resist hard wear. No bending, no loose handles. A quick wash and rinse whisk food away, keep this stainless looking bright.

*See your equipment dealer or write to*



HOTEL AND RESTAURANT DIVISION

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ONEIDA, NEW YORK

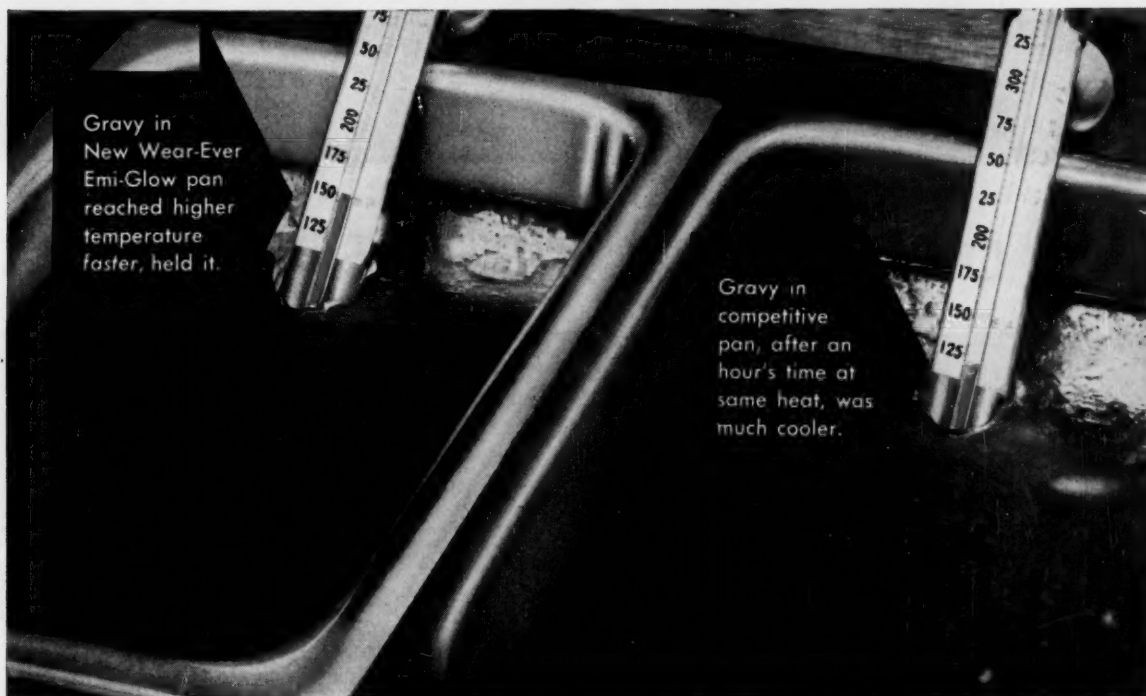


\*TRADEMARKS OF ONEIDA LTD.



**Amazing Test Results Show...**

# Up to 20° Higher Temperature in New Wear-Ever Food Service Pans



Gravy in New Wear-Ever Emi-Glow pan reached higher temperature faster, held it.

Gravy in competitive pan, after an hour's time at same heat, was much cooler.

Now, a new discovery in the field of heat transfer makes it possible for you to increase the efficiency of your hot food service operations, *instantly*—at a saving.

The secret is a new kind of pan—pans that look and fit like those you are now using, but with an amazing new surface that absorbs *more* heat, heats *faster* and holds *higher* temperatures.

Made from a special, hard wrought, long-lasting Wear-Ever aluminum alloy, these new pans assure *more even heating*, too. Because they *s-p-r-e-a-d* heat so efficiently, they practically eliminate the prob-

lems of scorching and flavor change due to "hot spots." You can bake in them, roast in them—transfer them from oven to hot food service table or counter, ready for serving.

Better food . . . tastier . . . faster! These new Emi-Glow\* pans are our answer to that growing demand. We want you to try them, see how they save you time, conserve fuel, bring out the best in flavor.

Let us give you the pleasant facts on prices, too . . . in practically all sizes (with or without covers) they're *lower* than your current pans.

\*A trade name, taken from the word "emissivity" . . . the ability to both transmit and absorb heat.

**SEND FOR FREE FOLDER...or Call Your Dealer, NOW!**



You can bake or roast in new Emi-Glow pans without fear of their warping or buckling . . .



Pans used for preparation go from range to table for serving . . . no need to change pans.

## WEAR-EVER ALUMINUM UTENSILS

The Aluminum Cooking Utensil Co., Inc.  
3501 Wear-Ever Building, New Kensington, Pa.  
Gentlemen: Yes, I want to know more about your new Emi-Glow hot food service pans.

- ☐ Please send me your free, descriptive folder.  
☐ Have your salesman call.

NAME \_\_\_\_\_

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MY DEALER IS \_\_\_\_\_





Half the class too cold...



then Trane gave them all the

*Trane Unit Ventilator with exclusive Kinetic Barrier Action  
ends drafts . . . sleepy corners . . . and stale air spots*

Here's a heating-ventilating system for modern schools that completely eliminates drafts, sleepy corners and stale air spots—that gives every pupil in the room a *fresh air seat!*

*Kinetic Barrier Action* provides a rising curtain of air across the entire length of the outside wall or window . . . a constant barrier of air that completely blocks out cold window drafts. As the air rises, it mixes with room air, creating a gentle,

circling flow of uniform ventilation across the entire room that eliminates stale air corners and hot spots. Result: a uniform climate throughout the room.

Ask your architect, consulting engineer or contractor how **TRANE** Unit Ventilators with *Kinetic Barrier Action* can create an ideal climate for learning in your school.

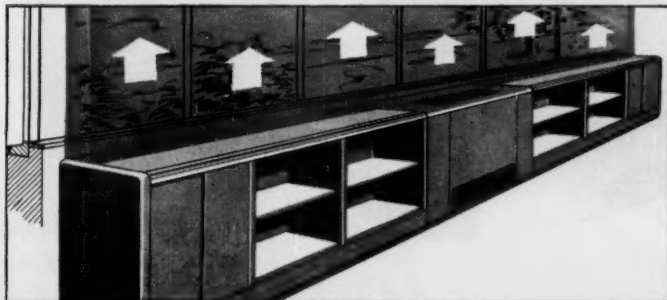


the other half too warm



right climate for learning

**HOW TRANE KINETIC BARRIER ACTION WORKS**—Air is forced out of wall extensions running the entire length of the outside wall or windows. This creates an air barrier that blocks out drafts. At the same time it mixes with room air to create a pleasant, healthful room climate. And, unlike ordinary systems with old-fashioned on-again-off-again action, *Kinetic Barrier Action* works full time. There's an ideal climate for learning every minute of the day!



*For any air condition, turn to*

# TRANE

**MANUFACTURING ENGINEERS OF  
HEATING, COOLING, VENTILATING  
AND HEAT TRANSFER EQUIPMENT**

THE TRANE COMPANY, LA CROSSE, WIS. • SCRANTON MFG. DIV., SCRANTON PA.  
TRANE COMPANY OF CANADA, LTD., TORONTO-96 U.S. AND 19 CANADIAN OFFICES



# *Hop, Skip and Jump on it!*

## **and Feel the Cushioned Flex of KREOLITE Gym Floors**

Here is a floor that welcomes any kind of action.

Because of its high *resiliency*, Kreolite Flexible Strip End Grain Wood Block Floors are actually kinder to the feet by lessening fatigue.

In addition to this highly desirable feature, Kreolite Floors resist wear, stay new longer and require only a minimum of maintenance.

For long lasting floor beauty and *resilience*, get all the facts on Kreolite . . . the better floor for gyms, multi-purpose rooms and school shops. Write today for installation data and specifications.

**KREOLITE** FLEXIBLE STRIP  
END GRAIN FLOORING

THE  
JENNISON-WRIGHT  
CORPORATION  
TOLEDO 9, OHIO





VISIT OUR BOOTH  
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**STEEL CAN TAKE IT!**



the only **ALL-STEEL** table and bench unit!

welded in  
precision jigs



Schieber In-Wall, the original folding table and bench unit for schools and still the only one built of steel, has an enviable record: The first In-Wall installation, made 27 years ago, is still in daily use. Thousands of these units have been installed across the country and in many communities it is the only equipment architects and school officials will consider. In the long run In-Wall is the lowest cost lunch room seating equipment you can buy. Write for our catalog.

IN-WALL

COMPAC-FOLD

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TRANSI-FOLD

**SCHIEBER**

FOLDING  
TABLES  
&  
BENCHES

12955 Inkster Road  
Detroit 39, Michigan

# Experience in Hundreds PITTSBURGH COLOR Contributes to



*An interesting combination of cheerful and relaxing colors in this kindergarten stimulates interest of the pupils to learn at the same time that they build enthusiasm for their daily activities.*

**Modern painting system gives you planned color environment  
that improves learning processes and work and study habits**

**H**undreds of schools and colleges all over the country are now enjoying the benefits of COLOR DYNAMICS. By actual experience, educators have learned that this system of painting accelerates learning processes and improves academic grades and behavior patterns of pupils of all ages.

● By following the principles of COLOR DYNAMICS, colors are being selected easily and accurately to fit the design and lighting of all types of classrooms. Proper consideration is given to the ages of pupils who use these rooms and their activities. Gloomy, drab rooms are made to

look pleasant, bright and cheerful. Rooms that face the afternoon sun are given cool relief. Small, stuffy rooms are made to seem spacious and airy.

● With COLOR DYNAMICS eye strain is lessened and concentration is stimulated. Students take pride in their improved environment and this often results in fewer housekeeping problems and less vandalism.

● Why not try COLOR DYNAMICS in your school next time you paint? You'll be pleasantly surprised by the difference it makes in work and study habits.



## PITTSBURGH® PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

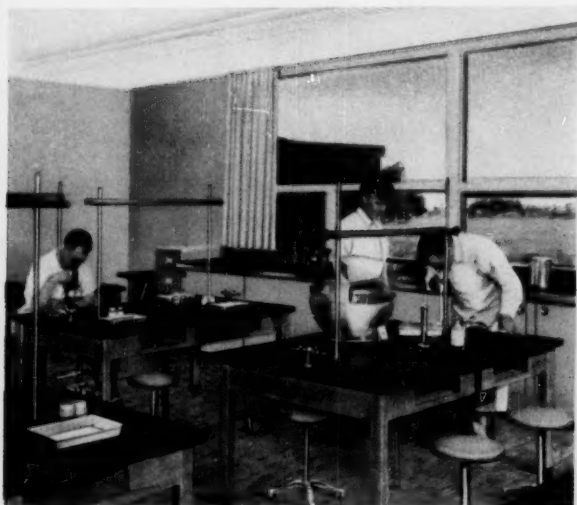
PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

# of Schools Proves **DYNAMICS®** Classroom Efficiency



*The color pattern of this classroom was carefully designed to focus attention of the students on the chalkboard and their teacher. Other wall colors reflect and diffuse natural light.*



*This science room has been painted a neutral hue to make color perception easier.*

## We'll Make a FREE Planned Color Study of Your School

• We'll be glad to send you a profusely illustrated book containing an explanation of the principles of COLOR DYNAMICS and how to use them in the classroom. Better still, we'll be glad to prepare a planned color study of your school, or any part of it, without cost or obligation. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our representatives see you at your convenience. Or mail this coupon.



**Pittsburgh Plate Glass Co.,  
Paint Div., Dept. NS-28, Pittsburgh 22, Pa.**

☐ Please send me a FREE copy of your booklet "Color Dynamics for Grade Schools, High Schools and Colleges."

☐ Please have representative call for Color Dynamics Survey without obligation on our part.

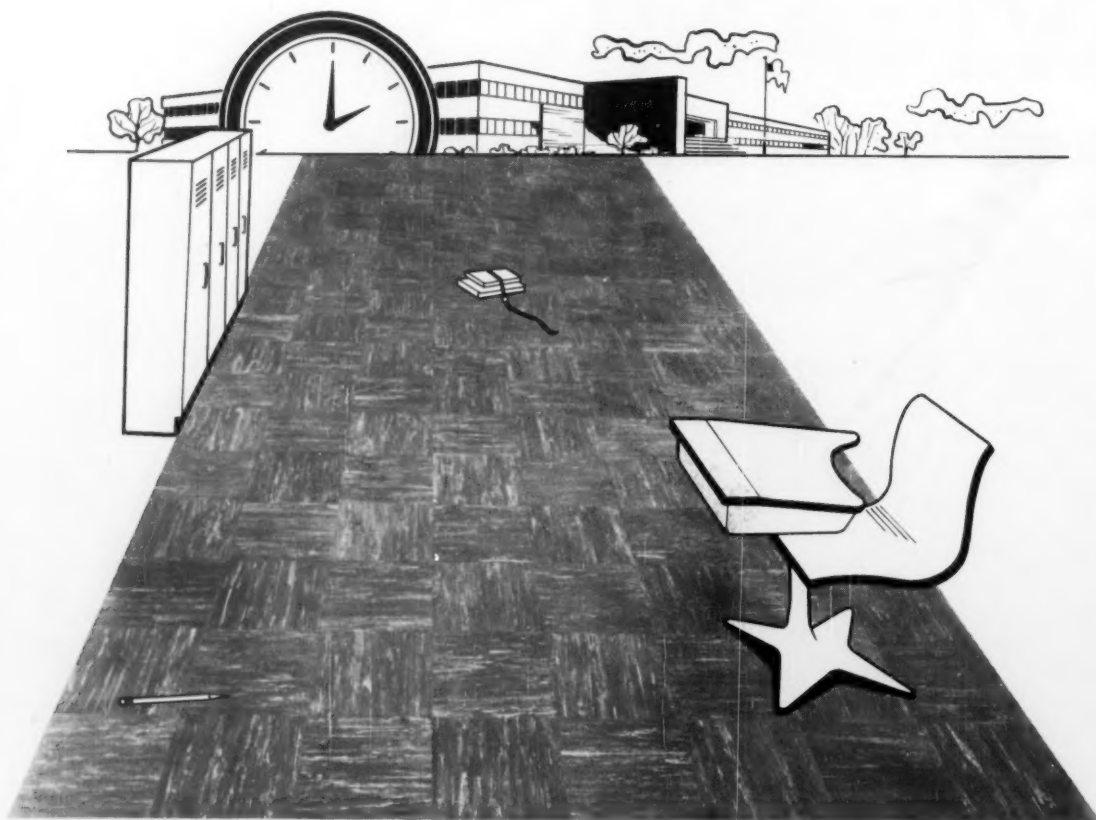
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**Where Every Hour is *Rush Hour*...**



*Vina-Lux*® FLOORS WITH *Micromatic Veining*

Rush-hour traffic travels best on floors of Vina-Lux vinyl asbestos tile. This modern flooring is built to out-perform any other type of resilient flooring...made to give you extra years of trouble-free service in any school floor area, plus substantial savings in maintenance.

Vina-Lux has other virtues, too. Its color range answers problems of decor and light reflectance. Its tough resilient structure resists indentation, adds comfort and safety underfoot. In 31 new attractive colors and four pattern styles. Write today for Vina-Lux color chart and samples.

*Remember . . . Vina-Lux costs less to own per foot per year!*



**AZROCK FLOOR PRODUCTS DIVISION**  
UVALDE ROCK ASPHALT CO. | 531 FROST BANK BLDG. • SAN ANTONIO, TEXAS



MAKERS OF VINA-LUX • AZROCK • AZPHLEX • DURACO



Because we all have a stake in his future...

# Samsonite

*is constantly researching the development  
of new ideas in classroom furniture  
embodying Strength, Design and Comfort*

*...new ideas like Samsonite's*

**DESK and PlastiShield CHAIR**



Samsonite's new PlastiShield study chair combines with a well-supported desk top to provide a complete mobile unit.

For all its lightness and maneuverability, Samsonite Furniture is the strongest on the market.

*Before you make  
a decision...your investigation  
is not complete until you see*

# Samsonite

*...and you owe it to him!*

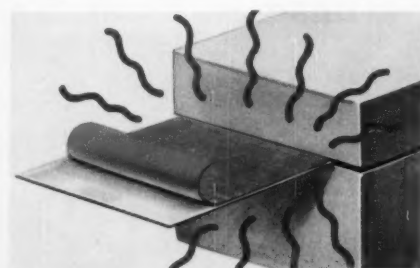
# Modern design...Versatility

## Exclusive

## SAMSONITE PLASTISHIELD



This is  
Samsonite's  
**STUDY DESK**  
that combines the  
best features of a desk  
and chair in one  
mobile unit.  
Desk is scaled to  
PlastiShield seat  
height. With  
book-box or book-rack.



This is  
Samsonite's  
**STUDENT DESK**  
that pairs off with the student chair.  
Can be used as desk or table.  
Available with open front book-boxes, or  
with lift lid and closed front book-box.

This is  
Samsonite's  
**PlastiShield  
STUDENT CHAIR**  
with exclusive compound-  
curve pivot-back support,  
extra-large contour seat.  
Carefully proportioned to  
assure less fatigue,  
more attention.  
Actually helps improve  
a student's posture.



**PIVOT BACK SUPPORT**—  
with swivel on two-point suspension.  
Cushioned contact points insure  
silent pivoting action.

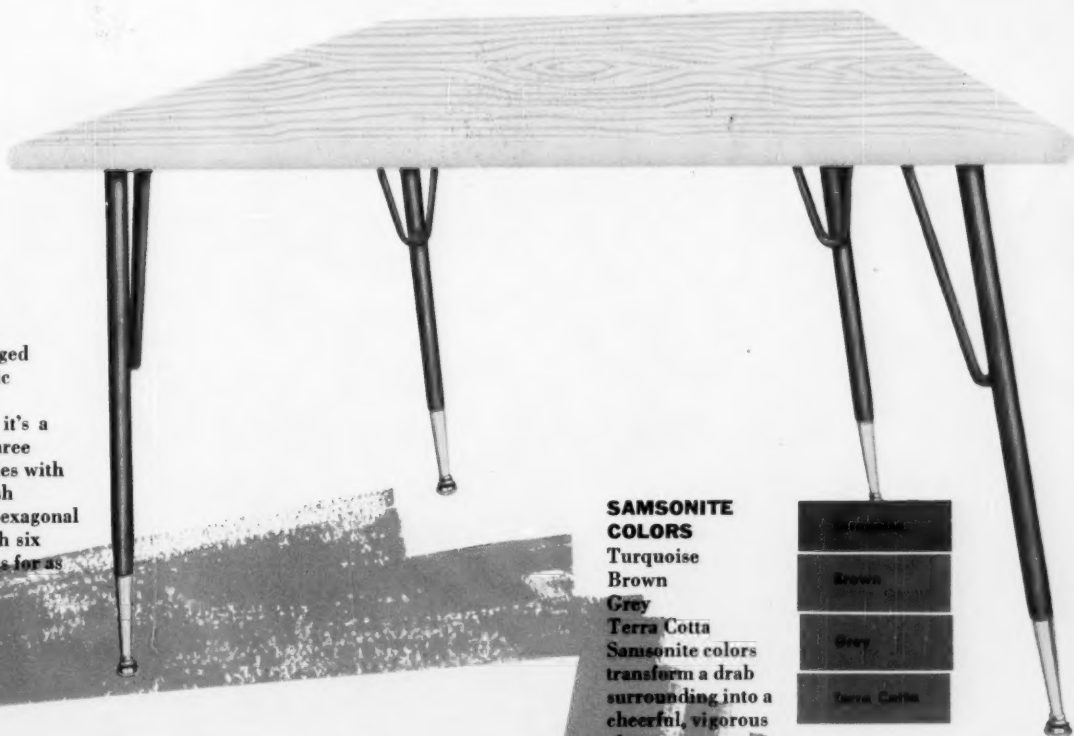


# Strength... surface...that's **Samsonite**

**This is  
Samsonite's  
TRAPEZOID  
TABLE**

that can be arranged  
in many geometric  
combinations.

As a single unit, it's a  
desk for two or three  
students. Two tables with  
the long sides flush  
together form an hexagonal  
"round" table with six  
well defined places for as  
many students.



**SAMSONITE  
COLORS**

Turquoise

Brown

Grey

Terra Cotta

Samsonite colors  
transform a drab  
surrounding into a  
cheerful, vigorous  
classroom.



**LEG SPATS**—Tapered  
metal "spats" camouflage  
scuffs and mop-marks, glide  
silently, effortlessly. Provide  
clean contrast to frame color.



**TUBULAR STEEL CONSTRUCTION—**

Adds strength without weight.  
Durable. Electrically welded.



**This is  
Samsonite's Single Pedestal  
TEACHER'S DESK**

equipped with spacious writing surface, roomy  
storage drawers, ample filing facilities.  
Durable construction and equipped with swivel  
glides to facilitate easy movement within the room.  
Also available in double pedestal model.



**The Foster Junior High School** of Seattle, Wash.  
uses Samsonite furniture. In this classroom,  
30 students can sit comfortably—with plenty of  
aisle room—in Samsonite's mobile Tablet-Desk.

1958—biggest school  
enrollment ever!

# OVERCROWDED?

*You need Samsonite's exclusive*

## PlastiShield FOLDING CHAIR

Samsonite reaches into the future to bring you a completely different folding chair. Watch your classrooms instantly take on new elegance with Samsonite upholstered-look PlastiShield folding chairs. Choose from washable tan or grey monochrome cloth patterns.



Guaranteed by  
Steel Reinforcing  
Patent No. 2,811,111



*...and Samsonite's original*

## ALL-STEEL FOLDING CHAIR

Because actual tests proved conclusively that Samsonite can withstand over 1,000 pounds without bending, buckling, or sagging an inch — Samsonite is acknowledged the world's strongest all-steel folding chair.



**Write Today** for your free Samsonite School Furniture catalogue. We'll send you Samsonite PlastiShield discs, so you can make the PlastiShield torture test yourself.

NAME \_\_\_\_\_

POSITION \_\_\_\_\_

SCHOOL \_\_\_\_\_

SCHOOL DISTRICT \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

SHWAYDER BROS., INC., Classroom Furniture  
Division, Detroit 29, Michigan.

# Samsonite

*Strongest  
lasts longest*



# SOUTH BEND...

## *Proved by Performance*



The best proof of the superiority of South Bend 13" Lathes is their past record. Shop instructors the country over will tell you of their experiences with these lathes—how quickly students learn to handle them—how they withstand hard usage—their complete suitability for vocational training because they are sturdy industrial lathes. There is no better proof than actual performance under identical conditions—let this be your guide when you select lathes for your shop.



### New MACHINE SHOP PROJECTS Book

Contains 34 practical projects—graded to match abilities of beginning to advanced students. Each project consists of detailed drawing, bill of material, step-by-step instructions. 104 pages, 8 1/2" x 11", \$2.00.

SPECIAL OFFER TO SHOP INSTRUCTORS—Sample copy of project book and companion book "How To Run A Lathe", (value \$2.50) sent for only \$1.00.

South Bend Lathes in Waukegan (Ill.) T.H.S.



13" x 4" South Bend Engine Lathe (less chip pan and electrical equipment) f.o.b. factory ..... **\$1675**



PLEASE SEND INFORMATION CHECKED:

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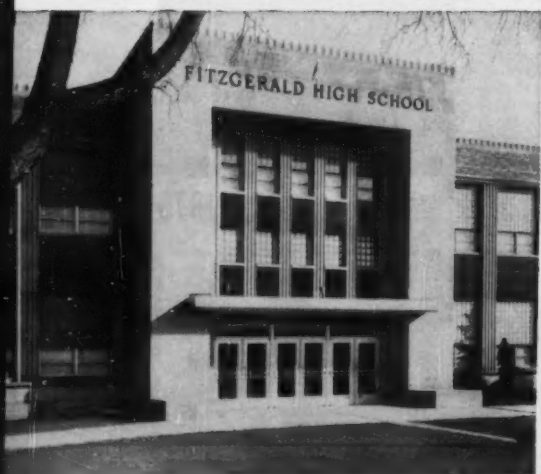
Name \_\_\_\_\_ School \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Building Better Tools Since 1906 • SOUTH BEND LATHE • South Bend 22, Indiana



# THIS NEW SCHOOL

## to stay new-looking with Huntington maintenance program and products



Front entrance of the Fitzgerald High School. Huntington care starts right inside the front door. The asphalt tile is protected with *Cosmolite® Anti-Slip Wax* . . . a water-resistant, self-shining liquid wax which withstands the rigors of heavy, wet traffic and frequent moppings. Dries bright and will not water spot. It's anti-skid, too.

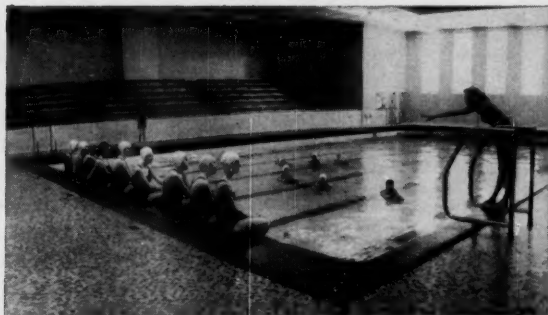
Sprawling two and one-half blocks along Ryan Road in Warren City, near Detroit, is one of Michigan's newest and best equipped educational plants—the Fitzgerald High School.

With a great variety of interior surfaces and a huge area to care for, Fitzgerald officials gave a great deal of thought toward choosing maintenance products. They accepted the simple, but complete, maintenance plan offered to them by their Huntington representative, Clare Bristol. Typical of all Huntington representatives, Mr. Bristol gave to the Fitzgerald officials a program based on sound experience, high quality products designed to make cleanup work simpler and faster, and personal skill to help the staff get started right. On these pages you can see just a few of the ways Huntington products are used to make this school building last longer and look better.

Maybe you have a maintenance problem. We'd like to help. Call the Huntington representative in your town or write to us direct today.

**Main gymnasium** of the multi-million-dollar Fitzgerald High School in Warren City, Michigan. The gym is used for many activities besides basketball. The floor is protected with *Crystal Seal-O-San*® which preserves all the natural hardwood beauty and gives a durable, non-skid, glare-free surface resistant to scuffing and rubber burns. It is a surface that is easy to maintain and offers full protection for the expensive hardwood, to keep it useful and beautiful over the years. For daily dust mopping, *Huntolene*®-treated floor mops are used. This Huntington product keeps dust down and prevents the growth of bacteria on the floor.

**Mr. Elmer Propst**, Director of Maintenance, Fitzgerald Public Schools, says, "The largest expense in my department is labor. Huntington has helped cut our labor costs. They have the right products to let us do our jobs faster and more efficiently. And their products are so easy to use, you can't go wrong."



**Luxurious swimming pool** with spectator balcony. The ceramic tile floor is protected with *Huntington Terrazzo Seal* which produces a waterproof, non-slippery surface. And because the seal is colorless, it will not darken a light floor. *San Pheno*® X *Germicide* is used to disinfect pool area and locker rooms.



**Cheerful library** with a floor of quiet cork. The cork is protected with *Weatherall Wax* which reduces slipperiness, protects against wear and keeps the flooring beautiful with little maintenance. Even under chairs where shoes leave scuff marks the luster can be buffed back time after time. Protection is sure with *Weatherall*.



**Lovely main reception room** . . . The floor is split stone which was slippery and hard to clean until *Huntington Terrazzo Seal* was applied. The protective coating seals in the natural colors of the stone. Coating keeps dirt on top where it is easily mopped away.



**Colorful classrooms** with asphalt tile floors. These floors are waxed with *Weatherall Wax*, maintained with *Huntolene*-treated dust mops and scrubbed and buffed with *Silent Huntington Floor Machines*. It's an effective program which keeps floors looking bright and new.



**Ask for the Man Behind the Drum . . .**  
your Huntington representative.

**HUNTINGTON  LABORATORIES**  
INCORPORATED

Huntington, Indiana • Philadelphia 35, Pennsylvania • Toronto 2, Ontario



# *Two top companies unite to bring educators*

## The Best in Closed-Circuit TV

**See for yourself!** *Don't settle for any closed-circuit television until you've seen how completely the GPL/NTS Team answers all your school needs!*

**You'll see** GPL equipment — finest in the field! Closed-circuit television that has *had* to be the best to achieve its pre-eminent position in military, broadcast, and industrial TV!

**You'll get** the quality that made GPL equipment the inevitable choice for front-page "firsts" in closed-circuit programs — the Salute to Eisenhower Dinners, which linked 52 cities — the Heart Video-Clinic, viewed by 35,000 medical specialists — the General Motors Motorama, celebrating its 50 millionth car — the nationwide theatre broadcasts of heavyweight championship fights.

**GPL leadership** in designing TV for direct instruction, teacher training, magnification, and other special needs has made it the first choice for pioneering educational TV installations at over 30 schools and universities.\* 90% of the nation's educational TV stations using video recorders are also GPL-equipped.

**GPL equipment** is simple to operate, versatile, surprisingly inexpensive. There's a full line of closed-circuit equipment to fit the needs of a single school or an entire school system.

**National Theatre Supply Company**, a prominent supplier of projection and auditorium equipment for schools, has teamed up with GPL to assume complete responsibility for all your School TV needs.

\*Details on request.



Branches in principal cities

Both are member companies of the highly respected GPE Group.

**Call** on the Educational Television Division of NTS for free demonstration in your school of how this GPL/NTS set-up answers all your needs. A national network of company offices — the largest nationwide sales and service organization offering TV equipment for schools — brings an NTS representative as close as your telephone!

**Technically trained** and with over 30 years of experience in field service, your NTS representative is qualified to help you at every step in choosing, installing, and maintaining your closed-circuit TV.

**He will** sit down with you, your school committee, or your architect, to discuss the preliminary requirements of a TV installation. He will give you practical advice on the selection of the right equipment. He will take full responsibility for delivery and installation, financing if required. He will follow through by instructing teachers and students in its everyday use.

**Maintenance** is no problem with NTS! Parts and service are promptly available anywhere in the United States. Your NTS representative is steeped in the tradition of "the show must go on," so he stands ready to help in any emergency — anywhere — at any hour of the day or night.

*The GPL/NTS Team.....*





**1. FIRST MEETING** with NTS representative is discussion of school's problems. He shows GPL equipment, describes operation.



**3. GPL VIEW-FINDER** camera, for studio or classroom use. Makes it easy to follow every move made by the instructor. Light and compact, it draws little current. Plugs into ordinary electrical outlet.



**2. GPL CLASSROOM CAMERA** gives all students front-row seats at science, laboratory and other demonstrations.



**4. BRIGHT, WALL-SIZE TV PROJECTOR** lets 1,000 people watch broadcasts picked up "off the air," or closed-circuit programs, in school auditoriums or in large multi-purpose rooms.



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# Looking Forward

## We Need More Than Scientists

HOW excited should one be about the Administration's billion dollar crash program to produce more scientists?

Although it is well intentioned, it really isn't sound educational legislation—and it's a mere pittance compared with what the federal government ought to be investing in public education. But, as an emergency program, it's much better than nothing at all.

*Unsound.* With scientific manpower and know-how so essential to our national security, how can we say that this special-aid proposal is educationally unsound?

The answer comes from many sources. In essence, it is: The plan is an imbalanced solution for a problem that is much greater than the Administration admits.

"Most people like to search for a simple solution to a complex problem," comments the American Association of School Administrators.\* "They look first for a pat and cheap way to do a difficult, intricate task. . . . It seems like a natural thing to some of these folks to pick out the science curriculum in the schools as the reason for all the American failures to beat the Russians. . . . It is downright dangerous to oversimplify America's present task. The plain fact is we must compete with the Communist world in every field of human competence, not merely in the world of science."

And, says the A.A.S.A.: "The solution for us is not to copy the Russian brand of education with its overemphasis on science and its underemphasis of the humanities, but instead to support with a far greater faith the concept of the improvability of man, all men, and the American kind of education."

We are jumping to wrong conclusions, too, if we think that the *present* system of science education in Russia is responsible for its sputniks and intercontinental missiles. This warning comes from Hollis L. Caswell, president of Teachers College, Columbia University. He cites a University of Texas study which reveals that the average age of Russia's 31 top scientists is 52 years. This means that virtually all of them received their basic training in science before the close of World War II. Of these 31 key scientists, 14 were educated in other countries, primarily in Germany and England. In Dr. Caswell's opinion, Soviet achievements in science can be attributed to its governmental policy of honoring and rewarding scientists and to its ability to control its scientific manpower.

\*American Association of School Administrators: *Hogs, Ax Handles, and Woodpeckers*. Pp. 12.

The A.A.S.A. also warns against being too quick to condemn our own ways of producing scientists. "Let's recall," states its recent bulletin,\* "that the educational system which is criticized today is the same one from which came the people who built the first atomic bomb, who flew the first airplane, who launched the first atomic submarine, who led the world in thermonuclear experiments, who developed mass industrial production of automobiles, bathtubs and telephones. And, by the way, gave the world sulfa drugs, terramycin, and the Salk vaccine."

*Compulsive Recognition.* There is one undeniable value in the program—its frank recognition that public education is a tremendous factor in the future security of this country.

The *New York Times* supports this conclusion editorially with these words: "But the central virtue of the program is now clear: The United States Government recognizes that high quality education of our citizens is essential for our survival. The days are gone when penny-wise and pound-foolish people could argue that government aid to education was a 'frill' or a 'luxury' to be a prime target of every effort at 'economy.'"

A *New York Herald Tribune* editorial describes it as "compulsive recognition" that all education, both in quantity and quality, is essential to national security."

*Folsom's Memorandum.* The memorandum released to the press by H.E.W. Secretary Marion B. Folsom had the official approval of President Eisenhower. Secretary Folsom offers what he says are three plain truths: "First, education is now more crucially important to long-term national security than ever before.

"Second, there are deficiencies in education which, if allowed to continue, could seriously weaken our national security effort."

*The Escape Clause.* And then, he opens the side door through which the Administration dodges any serious responsibility for the financing of education: "Third, the main support for education must come in the future, as in the past, from state, local and private sources.

"It should be clearly kept in mind that the Department," said Secretary Folsom, "does not view these undertakings in the field of education as a permanent federal responsibility in the usual sense of that term."

*Not Enough.* This is the inconsistent attitude with which the N.E.A. is becoming impatient. Asserts Executive Secretary William G. Carr in a release to the

press December 22: "The American people . . . now see that better schools are necessary to national survival. A larger part of the nation's great productive capacity must be channeled into the educational system. . . . The fiscal problem, however, requires a substantial increase in the present level of federal participation in the financing of education."

Dr. Carr's statement followed the action of the N.E.A. Legislative Commission in switching its emphasis from emergency federal aid for schoolhouse construction to a broader program of long-range support. It recommends federal grants starting at approximately \$1 billion the first year and increasing to \$4.6 billion in five years.

*Nixon on Record.* A clear and complete acknowledgment of this nation's reliance on schools was expressed by Vice President Richard M. Nixon in a speech a few weeks ago, published in part in this issue (p. 47). States the Vice President: "Our military and economic strength can be no greater than our educational system."

He, too, warns against the dangers that many school people see in the crash program: "We do not want an unbalanced, warped society which would be the inevitable result if undue emphasis were placed on scientific materialism. We want to develop the whole man, not merely one phase of the intellect."

Then Vice President Nixon passes the buck to the American parent, saying: "American education will be no better and no worse than the individual American parent wants it to be. . . . This responsibility cannot be passed by the people to Washington."

With this, Mr. Nixon, we only partially agree. Schools are not operated for the benefit of parents but for the protection and welfare of all citizens of this country, many of whom do not have children in school. The responsibility lies not only with parents, and not only with local and state governments, but also with national leaders such as yourself. Right now the future security of this country requires that its chief executives and lawmakers recognize the federal government's partial responsibility for the financing of public education.

*A.F.T. Is Skeptical.* The proposal is criticized caustically by the president of the A.F.L.-C.I.O. American Federation of Teachers, Carl Megel of Chicago. Mr. Megel, who himself is a science teacher, describes the program as a stop-gap that would develop only "military monsters and scientific supermen."

"Mr. Eisenhower's program is obviously for expediency and probably will solve nothing," says Mr. Megel. "It is time for the American people to demand the whole solution rather than an emergency stop-gap. The Eisenhower program once again overlooks the education of all children for national strength and peaceful leadership."

Mr. Megel asserts that scientists and teachers are among the country's lowest paid professions. "When we correct this," he believes, "we will begin to get enough students into sciences and enough qualified teachers to teach them."

*Partly Meets the Emergency.* Those who think the proposal is better than no help at all probably agree with the *New York Times* that "the program goes part way toward meeting the needs of our educational sys-

tem if we are to ensure our survival, but it does not solve all our educational problems nor was it intended to. The proposals for graduate and undergraduate scholarships are aimed at reducing the enormous loss implicit in the fact that because of financial difficulties many of our ablest young people do not receive all the collegiate and graduate training they could profitably use. The increased budget proposed for the National Science Foundation is a step in the right direction, since the foundation has long since proved its great usefulness. . . . The proposal to set up foreign language training centers strikes at a national educational weakness which has received less attention than the weaknesses in teaching science and mathematics, but which is no less serious a problem."

*Build for Peace.* The tremendous scope and complexity of education problems with which Congress and the American people should be concerned as a national policy are outlined by the Educational Policies Commission in a 5000 word statement on "The Contemporary Challenge to American Education."

The Commission recognizes the current needs outlined in Secretary Folsom's memorandum, but it sees danger to teacher morale in the raising of salaries for mathematics and science teachers only. Likewise it warns that "guidance of gifted students should not be permitted to detract from equivalent services for all students."

The major emphasis of the report was aptly stated by its vice chairman, Benjamin C. Willis, general superintendent of Chicago public schools: "Survival in this age may be staked on science, but the building of peace calls for knowledge, insights and abilities of many kinds."

We have recognized some merit in the crash program as an emergency measure, but we think that Congress should face the real issue of its responsibility for the financing of public education. This nation needs more than military scientists to win the cold war and to wage the peace.

## Prescription for Frustration

A CLERGYMAN being interviewed on TV was asked to express a prayer for 1958. His wish was that, as a people, we might learn to overcome our fears and frustrations.

As the pressure of responsibilities increases day by day, leaving so little time to do the things you would like, how often have you said to yourself: Oh, what's the use! What do all my efforts produce? Is this kind of living really worth while? Just where is our civilization going?

If you are in this mood, we especially recommend that you read the article this month by Arthur Henry Moehlman. Wait until you can have a quiet half hour by yourself, perhaps at home. Dismiss all other worries from your mind and examine your own philosophy as you read Dr. Moehlman's guidelines.

Perhaps you will discover for yourself a philosophy of life and education that gives you a new sense of direction and thrills you with a feeling of achievement.

*The Editor*

The NATION'S SCHOOLS

# Automatic Salary Increases Cannot Be Justified

Neither is merit rating defensible.

Recognizing professional growth is a better way  
to upgrade teachers' salaries and efficiency

JAMES W. BUSHONG



*Seeing his professional growth program in action has given James Bushong the opportunity to study and evaluate his answer to the problem of merit rating. Dr. Bushong has been superintendent at Grosse Pointe, Mich., since 1951. His professional career began in Oregon schools where he was a teacher and held several administrative positions. He received his master's and doctor's degrees from the University of Oregon.*

**S**HOULD a school system pay its teachers according to a uniform salary schedule (based on academic preparation and years of service) or on some sort of merit rating salary scale? This is one of the hottest and most controversial issues in education today.

"I wouldn't mind paying more taxes to increase Miss Jones' salary—she's worth it—but that Miss Black in the third grade is overpaid now. If you're going to pay them the same, I say No to higher salaries," says Mr. Taxpayer.

"How do you know Miss Jones is a better teacher? Can you prove it?" says someone else.

And so it goes. Is merit rating the answer? Can you prove that Miss Jones is a better teacher than Miss Black? Would a merit program result in better educational opportunities for boys and girls?

Would it raise the prestige of teachers as well as their salaries? One can get many different answers to these and similar questions. However, are these answers based on a background of factual experiences or on emotional outbursts fed by just plain wishful thinking?

## SUBSTITUTE FOR RATING

Let me state now what I intend to present in this article. I plan to point out some of the hazards of a merit rating program—at least as it is usually defined—and to conclude with what I believe to be a sensible and workable program to upgrade not only the sal-

aries but also, more important, the efficiency of teachers.

There are many varieties of merit rating and one person's definition may not fully satisfy others. However, the type of merit rating plan that seems to arouse the most objection is one which is administratively controlled and in which subjective judgment plays a prominent role.

The Department of Classroom Teachers of the N.E.A. indicated their concern for this form when they defined merit rating as: "Merit rating is subjective qualitative judgment of a teacher, made administratively by one or more persons, with or without the participation or knowledge of the person rated, for the purpose of determining salary." Let us consider that definition with full awareness that plans exist to which it would not be applicable, and that it serves as a starting point only.

## FORCED DECISION

Please note the term "subjective" as opposed to "objective." The implications and dangers of subjective judgment are multitudinous and complex. Self-imagery rears its ugly head. Barring the truly superior administrator—with infinite wisdom and inexhaustible patience—teachers will find themselves facing the choice of either conforming to the administrator's ideals, precepts and concepts in order to win recognition, or being themselves and perhaps being by-passed.

What will happen to our schools if such is the case? How creative will

our teachers be? Will the pressure to conform result in stereotyped teaching and, as a consequence, limited learning? Will our children in this environment really have the educational opportunities we want for them? These are a few of the questions one might ask when considering the administration of a school system operating under this type of merit program.

Here is another aspect. Many school administrators think they can pick out the outstanding teachers in a given school. Assuming that the yardstick for determining these "master" teachers is reasonably accurate (from a subjective point of view at least), let's examine what might result if these few were singled out for special recognition—notably additional compensation. This figure may be high but let's assume that 10 per cent of the staff qualifies for this select circle.

So far so good. Meanwhile, what about the other 90 per cent of our staff? What happens to them? Do they remain on an even keel and go on as if nothing has happened? I wonder! I don't believe this happens. As a matter of fact, I'm quite sure it doesn't.

Educational journals and periodicals, past and present, are crammed with evidence that the boat rocks very heavily and, in some cases, even capsizes. The 90 per cent who have been judged and found wanting are tremendously concerned! They wonder in what respects and to what degree they are deficient. What yardstick was used? Who applied it? When was it applied?

## AND AWAY WE GO

And so we are off. Can we defend a subjective yardstick or even explain it? What is truly effective teaching? What personality characteristics are more significant than others? We get into an area of semantics very quickly. Each of us sees a given object situation through his own eyes. We tend to emphasize our prejudices, and



I'm afraid we all have them in one form or another.

And so the teachers on our staff who have been judged and found wanting will wonder if sincerity, wholesome attitudes, loyalty and diligence are less important perhaps than showmanship, flash and flair, and window dressing.

One can see that many problems are involved when an attempt is made to rate such an elusive quality as teaching effectiveness. A measure of flash is desirable but how much constitutes a proper balance? One person's technic will be very effective for him but an utter failure for the teacher across the hall. Who can positively say, in the final analysis, which teacher is doing the better all-round job?

In selecting these master teachers should weight be given to the opinion of the pupils? I wonder what the results would be if we could get an honest report about the teacher the pupils thought was best when they were in school, and then a similar statement about the one they thought best 20 years later. Would it be the same teacher? Could be, but the odds are probably against it. In school the choice would perhaps be the athletic coach or the science teacher with a dramatic flair. In later life their choice might be one they found dull in school—a stickler for detail—but one whom they have now come to realize really gave them some principles or maxims to live by and with. Can we wait 20 years for children to mature to know which of their teachers was the most effective?

#### PARENTS CAN'T AGREE

How about parents' opinion? Should this be considered in rating a teacher? It would be most difficult. During the past year I have had several serious complaints from parents about teachers who were praised to the limit by other parents. As an illustration of this, one day last spring my secretary laid on my desk a letter from a parent. The letter was written to praise one of the high school teachers. In this parent's opinion the person under discussion was a superb teacher and he was lavish in his praise of her. Before I had finished the letter, I had a telephone call from another parent. You guessed it! She was complaining bitterly about the same teacher. This, of course, was a coincidence. However, any school administrator will tell you that a teacher rated excellent from the point of view of one parent may rate unsatisfactory in the eyes of another.

It isn't surprising that parents might differ on teachers because I'm not

**One teacher's technic may be most effective for him  
but an utter failure for the teacher across the hall.  
Who can say which is doing a better all-round job?**

positive that a professional school administrator can always determine, for sure, which of several teachers really caused the pupil's growth or ignited the spark. Isn't it possible that lessons taught in the second grade are really the ones responsible for the great growth in the fourth or fifth? Suddenly, that which seemed unimportant or irrelevant fits into place and becomes meaningful. The pupil's growth spurts—he really comes to life! The parents exult and the fourth grade teacher has done a terrific job. She is a master teacher. Is she? Or is drab Miss Jones, who taught the children when they were in the second grade, the teacher really responsible for the academic growth? How can we be absolutely certain?

Well, in spite of all these doubts, let's go on with our basic assumption that we can and have picked out 10 per cent of our staff as master teachers. Is this a good thing? Does it improve the total educational program for boys and girls? After all, we do operate the schools for the children and not the teachers. Let's examine this: We've recognized 10 per cent of our teachers and it would be reasonable to expect their performance and effectiveness to go along on the same high level they have demonstrated they are capable of maintaining. What does this add up to for the other 90 per cent of our staff who did not receive the special recognition of our merit rating plan? What does it add up to for boys and girls?

#### IT JUST WON'T WORK

It adds up to this: Nine-tenths of our staff—nine out of 10 teachers—will react negatively. This negative reaction will be in varying degrees, of course. Some will be extremely bitter and resentful. Others will be less so, and perhaps a few will be relatively untouched. However, the odds are high that the major proportion of the staff members will experience a letdown. Their effectiveness will be lowered to a greater or lesser degree.

Nor does it end there. The cancer of envy, of jealousy once implanted, does not necessarily remain constant or dormant. Conceivably it will grow as more and more teachers get together to compare notes on why Miss Jones or Mr. Black have been elevated and why they haven't.

To put it even more strongly, in spite of some extremely persuasive articles and speeches we have been hearing lately, I cannot conceive how the loss in total teaching effectiveness could be offset. It might be good for a certain group of superior teachers but instead of improving the total educational program for boys and girls, it would have precisely the opposite effect.

Well, so far I've painted a pretty dismal picture. Merit rating as it is conceived now and as it has operated in the past is not in the best interest of a better educational program for boys and girls. However, this is not to say that we should close our ears to those who clamor for it.

I must admit I suspect the motives of a few—although a very few—among the strong advocates of merit rating. I fear that they are impelled not by the thought of what is best for children but instead by the conviction that schools are costing too much and that substantial savings might be effected if merit rating were adopted.

Others honestly feel that the best person should get the most pay. I respect this opinion.

#### CAN'T COPY INDUSTRY

Then there are those who say we should have merit rating because workers in commerce and industry are paid in such manner. You've heard it often: Business and industry do it—why can't the schools? Incidentally, while I realize that this is said sincerely, I'm getting a little tired of hearing it. In the first place, workers in industry produce *things*, not *people*.

In the second place, where is the business that has 500 college graduates each doing the same type of work (as do our 500 teachers in Grosse Pointe) and each having the same responsibilities (as our teachers have) that pays these people according to merit. Perhaps there is one but I haven't heard of it.

When you get down to facts, I doubt whether there is a lot of difference. Business pays different rates for different jobs. So do the schools. Business pays more for greater responsibility. So do the schools. I would venture to say, however, that in the case of most sizable businesses the majority of the workers are in a lock-step pay schedule to a greater degree than are teachers.



What are we going to do about this problem? I said in the beginning I would present what I believed to be a sensible plan not only to upgrade salaries but also the efficiency of teachers. Here is my proposal and my answer to teacher competency and salary policy.

*Eliminate the automatic increment in the salary schedule.* Most salary schedules for teachers provide for an automatic increase in salary year after year for a definite period of time—some for as long as 25 or 30 years. In other words, all a teacher has to do to get a raise, modest though it may be, is to spend another year on the job. This type of schedule has served as a big factor in keeping pay scales for teachers far too low and should be abolished.

*Establish instead the principle of the earned increment.* I am now discussing the system I know best. I am discussing the Grosse Pointe Professional Growth Program. Teachers in Grosse Pointe do not advance automatically on the salary schedule. They do not get a raise in salary simply because they are a year older. Instead, Grosse Pointe teachers must show evidence of professional growth before advancing on the salary schedule. The philosophy of our staff, with the enthusiastic backing of the board of education, is not more pay for more of the same.

Instead it is our belief that a teacher should improve himself so that he can do a better job teaching boys and girls before he gets a raise in salary. Under this plan it is possible for *all* teachers to get good salaries—not just a certain percentage. In other words, what we are attempting to do is to raise the pay level of the entire staff of teachers rather than just a small percentage of so-called master teachers. More important, we are attempting to raise the teaching efficiency of the entire staff—and the evidence would indicate that we are achieving some measure of success.

#### ALL-ROUND APPROVAL

Here, then, is a program that provides incentive for every teacher and results in better teaching for boys and girls. It is a program, it seems to me, that meets with public approval. John Q. Public does not, in general, like the idea of paying more taxes to give Miss Jones a raise in pay merely because she is a year older. However, if he is convinced by objective proof that Miss Jones is improving herself so that she can do a better job of teaching boys and girls, then John Q. is not so quick to object.

One can say that just because a teacher takes a special course or does

something else to improve himself professionally is no absolute proof that he will do a better job in the classroom. This I will admit. Nevertheless, the odds are much greater on the side of his doing a better job if he improves himself than if he does not.

The question has often been asked: How do teachers feel about this? Do they like the idea of having to earn their increments, of having to prove that they deserve a raise? Frankly, I must admit that in the beginning there was considerable opposition to the plan in Grosse Pointe. Teachers didn't like the idea of giving up the automatic increment feature of the salary schedule, something which they had sought for years. After a great deal of study and discussion the program was first adopted by a 66 per cent favorable vote for a two-year trial period.

The staff realized that the sorts of things required for advancement were in a large part exactly what the truly professional teachers had been doing of their own volition all along. Their summer trips, their work experiences, their civic contributions and community service, their professional organization activities, as well as the college extension courses and summer school work, all were established as ways of improving themselves professionally. To ensure that various experiences and accomplishments were equitably weighed, an evaluation committee composed of four elementary and three secondary teachers functions annually to assess the relative merits of the evidence submitted.

After the trial period a secret vote was taken on the question of whether the earned increment plan should be incorporated as a permanent feature of the salary schedule. Approximately 90 per cent of the staff voted Yes, an overwhelming endorsement of the worth of the adoption of the professional growth program.

Do teachers outside our system hesitate about entering Grosse Pointe? It wouldn't seem so. This year we had approximately 3000 applications from teachers wishing to join our system. This fact, coupled with the foregoing expression of feeling on the part

of our veteran staff members, would surely seem to indicate that truly professional teachers have no objection to tying their salary prospects to evidence of professional growth.

I submit that the Grosse Pointe Professional Growth Program is far superior to a policy of automatic increases or a program of subjective merit rating administratively controlled. We do not have the problem of lassitude and complacency so often associated with the automatic annual increment schedule or the doubts and suspicions inherent in a subjective rating plan clouding the picture. As a result, the total school program for boys and girls is better. Such a plan is also, in my opinion, more effective in establishing better salary schedules.

I believe ours is a program that relates the teaching competency of all teachers to salary policy. If we are going to improve the total educational opportunities for children we must improve the over-all level of the entire staff, not just that of a select few. We must admit that the educational opportunities of boys and girls can't improve much until their teachers first improve themselves. Just being a year older does not mean improvement. Twenty years' experience could mean one year's experience repeated 20 times. However, if each year a teacher shows objective evidence of professional growth, the chances are he will be doing a better job.

I'm not saying we can't pick out the best teachers and pay them accordingly. I am saying, however, that there is reasonable doubt that it can be done fairly and accurately. Of greater concern is the consequence of our selection. After it is done the total result will probably be a poorer educational program for boys and girls.

A merit rating program may be a wonderful program for the few teachers who get extra money but I do not believe it is the best plan to improve educational opportunities for pupils.

For my money, and my children, I prefer that the level of the entire teaching staff be raised. This we are able to do through a professional growth program. #

**We must admit that the education of boys and girls cannot improve much until their teachers first improve themselves. Twenty years' experience could mean one year's incompetencies repeated 20 times. Yet if each year a teacher shows objective evidence of professional growth, the chances are he is doing a better job.**

# The Logic of Merit Rating

W. L. GRAGG

Superintendent of Schools, Ithaca, N.Y.

*I do not love thee, Dr. Fell.  
The reason why, I cannot tell.  
But this alone I know full well:  
I do not love thee, Dr. Fell.*

This doggerel, written by Tom Brown while he was a student at Christ Church, Oxford, in reference to his teacher, epitomizes one aspect of the current hot debate over merit pay for teachers.

We now face a situation in which Dr. Fell is showing a real and mounting concern about subjective reactions—not so much those of his pupils as those of his supervisors and his employers.

At the risk of appearing traitorous to the cause espoused by the National Education Association, which appears to be outright opposition to merit pay, I should like to defend merit pay both in principle and in practice.

The reference to the N.E.A. is specifically grounded in a resolution\* adopted July 1, 1957, by the association in convention at Philadelphia by what The NATION'S SCHOOLS reported to be a "thunderous voice majority." My article is an attempt to pit a still, small voice against the convention thunder.

## DISTURBED BY RESOLUTION

I am disturbed, first, by the presumptive aspect of the preamble to the resolution, asserting that "use of subjective methods of judgment . . .

\*The N.E.A. resolution on merit rating was worded as follows:

"Use of subjective methods of judging the quality of teaching performance in setting teachers' salaries has a deleterious effect on the educational process. The making of such judgments (commonly known as Merit Ratings) creates dissension which upsets the school. It destroys professional relationships and morale, causes strife between teachers and administrators, and leads to deterioration in the quality of education of children. Plans which tie teachers' salaries to such subjective ratings are to be vigorously condemned.

"The National Education Association believes that it is a major responsibility of the teaching profession, as of other professions, to evaluate the quality of its services. To enable educators more effectively to meet this responsibility, the association calls for continued research to discover means of objective evaluation of teaching performance for the purpose of improving instruction."

has a deleterious effect on the educational process . . . creates dissension which upsets the school . . . destroys professional relationships and morale . . ." and other dire results.

Even more disturbing is the report that an attempt to call for more research on the problem of teacher evaluation was voted down. The motto appears to be: "My mind is made up; don't confuse me with facts."

There appears to be some ground for separating into various camps (a) those who oppose subjective evaluation as against those who might

**Experience with merit salary schedules in our own system for 10 years leads me to believe that merit rating can work. There is evidence that other school systems are rewarding competent teachers without hurting the educational process or destroying teacher morale. Despite the N.E.A. resolution, I would urge classroom teachers to see what is going on in some of the schools where merit pay is working to the best interest of education and teachers.**

accept objective evaluation; (b) those who oppose merit rating tied to salary schedules as against those who accept teacher evaluation in general, and (c) those who oppose any reference to merit on any ground as against those who believe that it ought to be examined whether we like it or not.

If I may start at the end and work backward, I would dismiss the third element as wholly impractical, because *there is no way to avoid evaluation in any situation wherein two or more persons interact*. It is almost axiomatic of human relationships: "Everybody is evaluating everybody else." This applies equally to purveyors and consumers of ice cream

cones and to supervisors and classroom teachers. Hiding one's head in the sand will not likely cause evaluation to go away.

With respect to the second point, *it appears to be both illogical and unfair to grant equal rewards for unequal contributions in service*. If we continue to hold to the principle of uniform salary schedules to the exclusion of extra compensation for meritorious service, we must certainly expect to maintain a low ceiling on salaries for everyone who remains in the profession. It is reasonable to assume that some competent teachers leave teaching because of low ceilings; possibly other potentially good teachers fail to enter the ranks for the same reason. This argument is, of course, hypothetical until it is settled by more research than I have at my command. But I have at least as much basis for my conclusion as do the proponents of the anti-merit resolution.

## TOTAL OBJECTIVITY IMPOSSIBLE

The third point, and the one which draws the main fire, deals with subjective evidence. Behind this word is hidden a multitude of sins of school administration. Favoritism, discrimination and just plain "politics" are anathema to every teacher, and subjective rating seems to bear the burden of all their ills. But is this fair? Can we subjectively dislike Dr. Fell, thereby "rating" him, without perpetrating an injustice? Conversely, must we rely wholly upon "objective" evidence in reaching decisions that affect the status of a teacher? Is it reasonable to suppose that 100 per cent objectivity can be precipitated out of personnel relationships as a basis for judgments?

To be quite blunt about it, I think we ought to keep on looking at merit pay if for no other reason than to afford to teachers the chance to look forward to salaries commensurate with the higher income potential of other professions. #

WE HEAR a great deal these days of the challenge presented to the United States by the Soviet satellite launchings. The military and economic strength which these launchings demonstrate have understandably been of primary concern to us.

But without question our most fundamental challenge lies in the field of education. Our military and economic strength can be no greater than our educational system. That is why the American educational system is being subjected today to one of the most penetrating periods of criticism and reexamination in our history.

This is as it should be. It is time for all Americans to take a new and searching look at the nation's schools. We have often boasted that our educational system is one of the best in the world. But even when we are convinced that we have something that is good we must always strive to make it better. This has been the secret of America's progress.

In this spirit of constructive inquiry and not in any destructive or complaining sense, let us take a look at our educational system.

We should not overlook its many admirable features. We offer free public education on a broad base unparalleled in world history. We are striving to prepare our students to be participating citizens in a great democracy. In our classrooms today, students discuss the real live problems of our time. They visit farms and factories to see for themselves the bases of economic life. They have a large measure of self-government, again a preparation for good citizenship.

It would be a mistake in reacting to the Soviet challenge to swing to an extreme and lose these achievements. We do not want an unbalanced warped society which would be the inevitable result if undue emphasis were placed on scientific materialism. We want to develop the whole man, not merely one phase of the intellect. We want our students to be well rounded and responsible future parents and citizens.

#### HERE'S THE GREAT QUESTION

The great question is: Can we retain these admirable features in our educational system and still meet the criticisms that are being made by many parents and teachers and people in all walks of life?

Too often we hear the superficial and pat formula that the answer to all of our problems in the educational field is more classrooms, more teachers, more schools, and more scientists. Ac-

Excerpts from a speech made at the 29th anniversary dinner of Yeshiva University, New York, December 15.

Let's take

## A Searching Look at Our Schools

RICHARD M. NIXON

Vice President of the United States

tion on these fronts is essential. But we shall miss the target completely if we do not recognize at the outset that our major problem is *quality*, not quantity, of education.

To have better schools, we must begin by having better teachers. Moreover, we must give teachers the salary, prestige and backing to enable us to attract the best minds to this honored profession and to let them know in turn that we will back them up. When they insist upon work and achievement, parents at home must stand behind these demands.

We must recognize also that what and how our students are taught is as important as by whom and where. In this context let us examine three major criticisms that have been leveled at our school system.

#### THE THREE MAJOR CRITICISMS

There are too many soft subjects and not enough tough challenging topics that develop the mind. We know that a soft physical life leads to flabby muscles and poor health. A mental regime that lacks challenge leads to an underdeveloped brain and a weak intellect.

A related complaint is that too often we do not challenge our superior students. Even when they are taking demanding subjects, they find that the level of teaching is geared to the least gifted student. Too many superior students are being lost among the normal and mediocre. We need to seek them out, to inspire them, to encourage the development of the intellectual disciplines that alone can make them ultimately useful to society. We cannot develop scientific talents without first providing the inspiration from which the scientific brain catches the eternal spark of inspiration.

Perhaps the most fundamental weakness in many of our schools is that students are not allowed to face the challenge of failure. Passing is auto-

matic. Efforts are made to judge the child and his efforts, not his achievements. Many educators acknowledge these shortcomings but state that this is the democratic approach.

They say it is more important to help students to adjust to one another and to feel the warmth of success than it is to demand rigorous achievement. I sympathize with the aims of these educators. But I submit that their approach does not measure up to the reality of life. When students leave school, they will find that success is not automatic. Knowledge and achievement will count, not good intentions. In the hard competition of life, they will have to face failure. Since life is this way, then our schools do not realistically prepare students if they ignore these hard realities.

It is good to have democracy in our educational system, but it is also necessary to have backbone, standards and guidance. Young people want and need firm guidance. They may rebel against specific commands, but even the brashest of them knows that he has not the experience and wisdom to face the world unaided. As most parents have learned by experience, true parental love is firm, not indulgent.

#### IT'S UP TO THE PARENTS

American education will be no better and no worse than the individual American parent wants it to be. Whether it takes more classrooms, better teaching salaries, fewer frills, more algebra and less square dancing, this responsibility cannot be passed by the people to Washington.

As President Eisenhower said in Oklahoma City, this job must be undertaken in the schoolroom, in meetings of the parent-teacher associations, and the local school boards. What is needed is a national awakening not only to what the needs are in education but also to where the primary responsibility lies. #





Clear thinking and wise decisions are essential for educators when they consider the necessary steps to answer Russia's Sputnik challenge. Lloyd W. Ashby outlines here his concepts of the implications involved in Russia's achievements and how schools in the United States can cope with them. Dr. Ashby has been a teacher and principal in school systems in Nebraska and was a high school principal in Richmond, Ind., Moline, Ill., and Cheltenham Township, Elkins Park, Philadelphia. At present, he is superintendent for Cheltenham Township.

## TIME FOR DECISION

**LLOYD W. ASHBY**

Superintendent, Cheltenham Township School District  
Elkins Park, Philadelphia 17

THE place of education in the scheme of things American is undergoing a vigorous evaluation. By the time this is read Russia's first satellite may have found its way earthward, but the ideas and the implications of the satellite will still be up in the air.

For the first time in American history we have been shocked from our complacency, or, as the sixth grade boy expressed it, "we are all shook up." At times in our national history we have been challenged, surprised and betrayed, but never before has our

self-confidence been quite so shaken by sobering events and new understandings.

Certain implications and dilemmas arise out of the gauntlet thrown to the western world by the Russians, and dramatized by the satellite.

### Implication 1. Education is an instrument of national policy—both in the United States and in Russia.

In the United States the business of education has been reserved as a state and local function. Historically and traditionally, education here has been conceived of as an instrument of national policy in the sense that what is good for the individual is good for the nation. The sacredness of the human personality and a profound faith in the meaning of education for the individual and for the culture have

made education a highly significant aspect of our society.

Such a view as the foregoing one has prompted this nation to attempt to educate all the children of all the people, to encourage communities and individuals to find and to lift themselves through education.

In Russia education is an instrument of national policy in quite a different way. The interests and needs

of the state come first. The individual, to a large extent, necessarily subjugates his own wishes and ambitions to those of the national interest. When forced by emergencies to do so, we have done the same throughout the history of the United States. But the Russian leaders are apparently making this an imposed way of life for their people at all times, whether for peace, for hot war, or for cold war.

### Implication 2. Russian leaders are shifting ground in the battle for the minds of men to the minds of the Russian masses.

The Russian dictators see clearly that education is essential to the achievement of their objectives. Their first recognition came in the fields of mathematics, sciences, languages. Now they are showing some signs of broadening their program to include some study of international affairs. But, as

yet, there is no evidence that even the Russian intelligentsia can escape the strait-jacket of the Kremlin.

Isaiah Berlin of Oxford, writing in the December issue of *Foreign Affairs*, says on this point:

"The methods which have been taken to suppress the least symptom

of independence on the part of even the most faithful Stalinist intellectuals (let alone deviationists or unreconstructed relics of older dispensations)—and, let it be added, the success of these methods—are a phenomenon without parallel in the recorded history of human oppression."



### Implication 3. More money is needed for education if it is to be effective as an instrument of national policy.

Russia spends more than 6 per cent of her national income on education. In the United States we spend 3.5 per cent on public education and 4.5 per cent on all education, public and

private. The authority for these figures is Rear Admiral H. G. Rickover, an outspoken critic of American schools. Admiral Rickover goes further to say in a recent issue of *United States*

*News* that "sacrifices [in support of education] to give America strength in the race with Russia would be insignificant in view of our enormous margin of luxury spending."

### Implication 4. Since the aims of education in Russia and the U.S. are not identical, school programs cannot be identical.

The free movement of individuals in our society, both vertically and horizontally, along with our traditional democratic freedoms, constitutes the very muscle and sinew upon which our greatness has been built. The indi-

vidual is important, not to be pampered, but to be challenged and encouraged. Furthermore, we recognize that there are individual differences.

To attempt to copy the Russian educational program in all respects or

even in its main emphasis would be worse than futile. We believe in America that all children have need for a liberal education, so far as each one's abilities, interests and talents will permit. Not so in Russia.

### Implication 5. The present near-hysteria is ample evidence of the fact that schools reflect a culture as well as help create it.

When the American people recognize the seriousness of the situation by a willingness to sacrifice of their energy and substance to national de-

fense through education, that will be reflected in the schools. We cannot accomplish the desired ends without adequate salaries for personnel or with-

out adequate buildings and equipment. Neither can this be accomplished without a renewed sense of obligation on the part of the teaching profession.

### Implication 6. Schools at all levels should examine and scrutinize their programs minutely.

Are our programs too soft? Are we expecting too little of some students? Can the total number of years for completing general education be reduced in the interests of the national welfare, while preserving the traditional values we cherish? Are we using our teachers in ways that most effectively utilize their skills? Should mathematics and science be given greater emphasis, even at the expense of other values needed for a democratic civilization? Are we actually willing to experiment to see what can be done without having our hands forced by zealous but narrowly oriented groups that are sincerely concerned for the future of our nation?

In the world struggle between the United States and Russia, major dilemmas relative to education face both protagonists. Russia has now set the stage of battle in the classrooms.

*Russian dilemma.* For how long, and to what degree can a nation educate its citizens without having either greater participation in public affairs or revolution? As George S. Counts

has pointed out, literacy, education and freedom do not necessarily go hand in hand. At least to the present time, Russian leaders, by fair means or foul, have succeeded in keeping a nation enslaved at the same time that educational levels are rising. How long can this continue to exist?

*United States dilemma.* How can we meet the challenge of the Russians without sacrificing our national and individual ideals? Must we draft people to be scientists, or must we bribe them with scholarships, thus removing an essential element of free choice? Must we abandon the great American experiment of education for all, or can we continue that program, and at the same time add strength where strength is required? Must we cater to reactionary elements in our society?

All kinds of people are needed to make a great America. The education of a truly great American citizen may be an even more complex task than that of creating a first-class scientist. Some how, some way, a sense of direction must come from the essential

common sense and good will of the masses of our people. To neglect the best possible education for all in the interests of a narrower education for the few would be a tragic, long-range mistake.

Neither America nor American education should be sold short in a time of crisis. At the same time, our too complacent attitude must be replaced by honest and strenuous efforts to improve our educational program for all as a means of improving our national posture of defense. Each facet of this is essential to the other, and neither can exist alone.

One must have faith that when the facts are all in, when the first reaction has been replaced by a calmer view, the American people will make a decision in keeping with our national traditions of a free people in a free society. In this manner our way of life will successfully withstand the onslaught of the times and, in so doing, our spiritual resources, as well as our intellectual and material resources, will be strengthened. #

## OPINION POLL

### **Give more time to science and mathematics, say the majority; others ask for better science teaching and more motivation.**

*A nationwide sampling of superintendents' opinions by The Nation's Schools*

SCHOOL administrators are almost universally agreed that more emphasis should be given to mathematics and science, according to this month's Opinion Poll. However, they differ in their opinions as to how this should be done.

The majority say that all children, from the elementary grades on through high school and college, should be required to give more time to the study of the sciences. Others believe that the teaching of the sciences can be made more effective without disrupting the present balance of the curriculum. All school people agree that the maximum opportunity for studying science should be given those whose abilities and inclinations merit it.

Administrators are about evenly divided on the question of more required study of science in the elementary schools, with those in favor (52 per cent) having a slight margin. Percentages climb to 67 per cent in favor of more required study of science in high schools, and 65 per cent for college. (About 19 per cent of the respondents said they were not familiar enough with college curriculums to answer that question.)

Comments from respondents indicated three differing points of view. There are those who advocate an all-out effort, devoting increased time to the sciences, lengthening the school day to 5 p.m. and the school year by from 1 to 3 months and eliminating all nonacademic subjects from the school course load. A middle group believes that moderate lengthening of the required science class time could be supplemented by better guidance

plans and accelerated courses for bright students. A third group concludes that their schools are now allotting sufficient time to the sciences but should try to make better use of that time.

Administrators who belong to the all-out effort group want extracurricular activities excluded completely from school time. They favor discontinuing "all such nonacademic courses as music, art, health education, driver training, vocational subjects, and physical education."

An educator from Iowa states, somewhat preemptorily: "Do not permit students who are able to grasp science and mathematics to enroll in easier courses." "Require all students with average or better I.Q.'s to take more mathematics," says a Colorado man.

Exactly this trend of thinking seems to be bothering many of the more moderate group. They favor the intensive, speeded-up program only for those who are able and willing. "Students must always have freedom of choice if America is to remain a democracy."

Members of this second group advise that students with high abilities be guided gently into the sciences. They suggest beginning guidance much earlier. "The only thing needed is to interest the students. Parents could help."

As well as developing their children's interest in science, parents can also help to give general intellectual prowess a more reputable and honorable status, say several respondents. "Parents and students must learn that the only way to become educated is

to put forth more effort," says a Nebraskan.

"Combine history, geography and social studies, and give them less emphasis," says a Kansas man. Social studies received the most votes for discontinuance. An embattled few would drop English literature at the high school level, and grammar is attacked as "technical and unrelated" by a Michigan educator.

"We should not get too radical about math and science subjects simply because of Russia's Sputnik," says a Texas administrator.

A third group stoutly maintains that schools already devote sufficient time to the sciences. "The present furor over science education is similar to the one of a few years ago over 'why Johnny can't read,'" says a Wisconsin man. Chief objection of this group to an indiscriminate increased emphasis on mathematics and science is that it would be of little value to those students who lack the inherent ability.

"Must we teach more math and science to those children who are going to become garbage collectors, concert violinists, barbers and insurance salesmen?" inquires an administrator from Florida.

#### **SUGGEST CHANGES**

This last group feels that, without changing present requirements, much could be done to improve both the content and the presentation of science and mathematics courses. "Too much rote!" says a New York superintendent about our mathematics courses. "Smaller groups, more equipment, more practical experiments," says a Missouri man about science courses.

A few hopeful souls think that the entire problem of better education in all fields, including the scientific, would be solved by more teachers, better school buildings, and more money. Some also wished wistfully for better trained as well as more teachers.

Most of the respondents who checked No to the question of devoting more time to the sciences indicated that they are in favor of letting gifted children carry an intensified schedule, but they object to a compulsory program of emphasis for all students able or otherwise.

However, a New York man unequivocally checked No for all three categories and stated: "In a century, that has been dominated by science, where are our blessings? For every step forward in science, there have been steps back. . . ." He cites the highway accident toll and the "devil's checkmate" of the atom bomb. He asserts that the world needs the humanities and sanity now, more than ever. #

#### **Should more time be allotted to the teaching of mathematics and other exact sciences as required subjects:**

in the elementary schools?	Yes.....52%	No.....48%
in secondary schools?	Yes.....67%	No.....33%
in colleges & universities?	Yes.....65%	No.....35%

If education is the key to a  
better world, we must understand  
the world's philosophies—  
then we may be able to

# MAKE BETTER CHOICES

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THE educator in the modern world faces certain problems peculiar to our times and yet as old as human-kind. These problems, persistent throughout human history, can be identified as *directional*, *relational*, *operational* and *organizational*.

## WHERE SHOULD WE GO?

*Directional*

The directional challenges are studied by philosophers as the general theory of value, or more specifically, as ethics. Ethics concerns itself with a definition of the good or noble life, dealing with problems of conduct in relation to ultimate values. The Greeks struggled with this problem when they spoke of *hubris*, or a sort of arrogance, perhaps catastrophic pride, which brought down the anger of the universe or the gods, and also of *aidos*, or a certain modesty or sense of gratitude for a good world. A trend toward insolence and greed has often preceded or accompanied the decline and crash of a human society.

A further element of directional challenge is a human society's picture of the future. Its hypotheses about what is wisest and noblest to do are sometimes called Utopia, or perhaps more accurately Eutopia—the first meaning a nowhere place and the second meaning a better place. A culture's Utopia not only determines where it is going and what it would like to have, but also gives it its interpretation of its past without which any understanding of the present is impossible.

Directional ideals can vary from those of a highly central and stable society in which the ideals are determined by ascribed status and by tabus or what not to do to those of a large, complicated society which changes quite rapidly, and in which change and progress and discovery are set up as ideals conflicting with certain common values that are sacred and superior to this change.

What are the values most important for society and the modern world about which educators should be concerned?

Plato insisted that the balanced person should choose four great values: (1) wisdom, (2) courage, (3) temperance, and (4) justice (which combines both courage and wisdom).

Are these sufficient for today? Other value configurations have been suggested, such as:

A	B
Adventure	Survival
Truth	Order
Beauty	Security
Peace	Affiliation
C	D
Health	Vitality
Work	Courage
Wisdom	Sensitiveness
Love	Intelligence

Which configuration would you choose? Are all values anticipations of the future?

## WITH WHOM MUST WE WORK?

*Relational*

The relational challenges have always been of vital significance, and today they become more so. Human

relations have always been the basic problems. How can people of different ways of life meet and learn from one another constructively?

We have discovered that neither force nor uniformity are wise in practice. The Gospel of Freedom and the Gospel of Multanimity are preferable, because then man can wander freely back and forth with his ideas and tools and have adventures of the spirit, of thought, of art.

People of different views aren't enemies; they are valuable teachers as long as they have something which can be understood and commended and which isn't destructive.

What we're suggesting is that these relational challenges are both individual and social, both close at home and worldwide. On the one hand we face today more than ever the problem of human fragmentation, which the Greeks fought against in their idea of the complete person, and which Comte, the great French sociologist and philosopher, criticized as a great shortcoming of his own Nineteenth Century.

Comte it was who lamented that people either specialized on the making of nails with their hands or solving mathematical equations with their minds, and the larger business of living was neglected. Social conflict within a culture and conflict between cultures are also great problems of our times, whether we speak of mental health or genocide.

Educators play a primary rôle in facing and solving these challenges. They work with both the directional and relational problems throughout the entire life span, either as teaching parents or as teachers in the formal educational system, or as teachers in



the informal educational system of libraries, mass medium communication, or in any vocational area.

Today we operate in a complex and fluid society which runs some definite risks from individuals who are relatively uncontrolled and can wreck social cohesion. Furthermore, our trend toward intensified specialization leads directly to a failure of communication between the members of a human society so that they cannot understand one another. Our very specialization must always be balanced with a generalized education in a central organization of values and in the common purposes to which everyone must be loyal.

### HOW SHOULD WE OPERATE?

#### Operational

How can we operate our process of education most wisely so as to move in directions required by a world with a too rapidly growing population, tremendous conflicts in ideologies and Utopias, with great problems in human relations both within each human society and on a planetary scale.

Functional operation will have to take into account both the transmission of basic survival values in the culture and also the cultivation and nurture of the individual personality. This does not mean the use of either a Greek or statistical Golden Mean. It does mean that we will have to make some definite choices which are not based merely upon so-called scientific or objective evaluations, but which come out of the folk wisdom, myth history, time, art and language.

A really functional operation today will have to recognize that the first level in any area of knowledge, method of inquiry, or level of education is what one might call that of collection, observation and scientific analysis. This second and higher plateau is that of relating the ideas or technics or data to human purposes and needs, both those of the individual and of society; in other words, the humanities level, which includes all the great disciplines.

It would seem that in order to become operational today, the educator as he faces his modern world problems will have to operate as a member of a team. It is not feasible for any one expert in any one discipline, whether it is history or sociology, literature or art, chemistry or mathematics to solve a problem; instead, a team attack is required. These efforts must be synchronized with that of

the educator who is primarily concerned with the humanization of the various disciplines with their data and methods of inquiry in such a way that they operate effectively on each level of learning.

This does not mean, for example, that we need countenance a crass utilitarianism and forget esthetics. Nor does it mean that we have to limit learning to Spartan levels based upon carefully carried out word-counts which squeeze all of the juice and color out of the human vocabulary. It does mean that educators are a team drawn from many disciplines and that no one person is capable of overarching or encompassing all fields of knowledge.

As educators face the challenges of the modern world they must construct an operational synthesis which the dead hands of the past do not control, especially in the time peak of history granted to us. We live in a unique time where the *Zeitgeist* permits and commands us to make new advances toward humanity's vast future. *It is perhaps the greatest chance ever offered to create freedom with order.* Furthermore, all military staffs state that any general war would only bring a universal catastrophe. They no longer speak of war as an instrument of national policy that could bring some desirable results.

In addition, we now have the knowledge, tools and resources to make ourselves and our world what we think it really should be. People do not have to starve, nor do they have to be ignorant, and they can live a long time. We can win: freedom from fear and want; freedom of speech and worship, and to learn the truth if we wish to pay the price. An entire planet may live as a world of freedom under laws where no individual is forgotten or lost or wasted and where a creative peace is possible.

The ghosts of the past still struggle with us. Throughout the world today each country and each people has its own ghosts that fight with other ghosts. For example, Karl Marx and Lenin fight against the English Liberals and French thinkers like Rousseau and Voltaire. Peter the Great and Catherine the Great behind the Russian dreams of empire fight against the ghosts of Frederick the Great, Napoleon and others. Behind these personal ghosts are the really active ideas which may be summarized as follows: Nationalism, Imperialism and Mechanization.

Each one of these primary ideas has been valuable and has served humanity, but none must be permitted to interfere with our planning of the future. Each one of them was an

honorable revolution in its own way, but each has served its time.

Nationalism developed the peculiar genius of each people, and we want to maintain those different geniuses and cultures, but we cannot insist upon imposing them, as in imperialism, upon everybody else; otherwise the world will be made up of stereotyped robots.

Mechanization was one of the great elements of the Nineteenth and Twentieth centuries, but it threatened to take command of humanity rather than serving it intelligently.

A new operational thesis is now necessary as one looks toward the future, and it cannot permit the ghosts of the past to destroy a clear picture of possible contingent futures. The questions are: How may one determine directions wisely? How may one make a new synthesis? The answers are through a teamwork that utilizes organized human knowledge, that utilizes the great disciplines of the humanities, social sciences, and sciences in the light of human philosophy and history so that the good and noble life may result.

### WITH WHAT STRUCTURE SHOULD WE WORK?

#### Organizational Challenges

It seems clear that intelligent organization or structure will be paramount in assisting the educator to meet modern world challenges as he deals with their directional, relational and operational aspects. "Structure" may be defined both as including ways of looking at or analyzing education and its rôle in human society in the Twentieth Century, and as intelligent organizational procedures. The idea of structure is a very important one, because education is merely one of a complex of universals which make up a society and which is hamstrung if it is not seen in its true rôle of instructing, training and educating individuals and groups in their proper rôles as they operate in each one of these universals, including education itself. One morphology has proved useful including four major groupings:

1. Education, Philosophy, Religion and Ethics, Communication and Language.
2. Health, Recreation, Vocation and Art.
3. Technology, Economics, Social Structure, Government.

Case studies are important in discussing structures or organizations which the educator must know about. For example, some illustrations of Grouping 3 are recent European struc-



tures called Euratom and Common Market. In Rome on March 25, 1957, treaties were signed creating a European Atomic Energy Community (Euratom) and also a European Economic Community (Common Market), and these have tremendous significance for six countries of Western Europe: Belgium, the Netherlands, Luxembourg, France, Italy and West Germany, together with their allies in the free world. The European Coal-Steel Community had already existed as a basis for energy and power sources. With Euratom these nations will have hopes of solving perhaps their most pressing problem, access to new sources of energy, which will enable them to develop their industrial potential.

This, together with the European Economic Community or Common Market, will give Europe some of the advantages that the United States has possessed for a long time, namely, extensive power and energy resources, high industrial potential, and a common market, together with the dynamics of mass production technology and a universal education. Europe still has to acquire some type of federal government that will enable better cooperation in all the areas or universals of human living.

#### ATOMS FOR PEACE MOVE

Another case study is the first International Conference in the Peaceful Uses of Atomic Energy. In the year 1955, from August 8 to August 20, delegates from 73 countries and from seven specialized agencies of the United Nations came together in the *Palais des Nations* in Geneva to enter upon one of humankind's great adventures: the humanization of atomic energy, the exploration of applications of the essentially peaceful atom. This was the first International Conference on the Peaceful Uses of Atomic Energy.

For the first time really a great conference of governments was called with high officials, with standing technical and scientific experts, and with politics deliberately and successfully set aside. In this meeting of organized human knowledge, the boundaries of all disciplines were diverted in order to explore the meaning of the new atomic energy. Atomic energy permeates all fields of knowledge—the arts and the humanities, the social sciences and natural sciences ranging from physics and chemistry to biology and botany, and to metallurgy, engineering, agriculture, and industry, economy, and, most certainly above all, education.

Add to this tremendous conference the efforts directed by scientists



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throughout the world during the International Geophysical Year, begun in 1957, in analyzing the earth with its atmosphere, which we all inhabit as a planet, and one begins to see some of the aspects of man's vast future. The International Geophysical Year includes the launching of space satellites and the first phase of the beginning of man's understanding of himself as a planetary race rather than single races in conflict, and his reaching out toward the stars, if he will.

In creating any organizations and structures and in operating them, or relating them, directional challenges are still paramount. Educators must remember that the directional questions that are of the greatest interest to really original and speculative minds cannot be answered by either science or religion as convincingly as they seemed to have been answered in the past. Here are some of the great questions about which education and the culture in which it exists have to make value choices.

Does the universe in which we live have any real purpose or unity, and is it moving toward some constructive goal?

Does the human spirit or mind possess freedom of the will, or is it subject to matter and determined by it?

Does history follow an inexorable development toward a predetermined Utopia, or is history a flexible thing determined by the actions of human beings?

What is man really? Is he a god as he appears to Hamlet; or is he a dog as he appears to Pavlov?

Is man a small, biped organism made up of water and not-so-pure carbon staggering about on a minute and little considered planet from the point of view of the astronomer of the galaxies; or is he a demigod capable of traveling the spaceways and improving his own nature?

Is there a way of life that is ignoble and timid and impotent, or is there a way of life that is truly great and wise? Or are all the ways of living merely futile gestures?

Does the good life deserve to be valued highly only if it is eternal, or is it worth searching for even if our universe is moving without halt toward destruction?

#### NO COMPLETE ANSWERS

There are no complete answers to be found to such great questions in either the laboratories of the scientists or in the studies of the theologians. Nevertheless, they must be studied. This is above all the business of the philosopher, the historian, and the student of the humanities, as well as of the scientist and theologian.

We can answer why time should be seemingly wasted on such difficult and perhaps seemingly insoluble problems. First, we are individuals who face the frightening condition of being lonely wanderers in the cosmos. Science tells us too little, and we become insensitive to things of great importance and may acquire a kind of *hubris*, or arrogance toward the universe. Second, we know that men's actions depend on their theories about themselves and their world and what is evil and what is good. To understand ourselves and other nations we must explore and know their philosophies. Then we may be capable of making better or wiser value choices for education.

We must use philosophy, history and the humanities, the social sciences and natural sciences to define the basic values in living, to provide a synthesis of knowledge from all areas, and to suggest hypotheses for a wise projection into the future.

The point of view grows that human beings are unique in their ability to create for themselves a symbolic universe which is even more important than the three dimensional things and objects among which they move. It is not the things that really make us happy or sad, that produce good or evil, it is our ideas about the things that most strongly affect us. Therefore, education may be the key to a new and better world if we can visualize what that world should be.

# NINE WAYS TO CUT BUILDING COSTS

**E. W. DYKES**

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Architects, Canton, Ohio

UNPRECEDENTED sums are being spent for school buildings, and it is inevitable that controversy should arise regarding their cost of construction. Literally mountains of misinformation are available on this subject. I think I can show the error of some of this talk and place certain items into proper perspective.

Before discussing the importance of utilizing proper methods of calculating schoolhouse construction costs, it will be well to stress that a school's program has more to do with costs than do materials. In the state of Ohio, during 1956, capital outlay for buildings represented only a little more than 10 per cent of the educational dollar. Thus, if we reduced building costs 10 per cent and in doing so added nothing to maintenance and operation, we would cut the cost of education by only 1 per cent. If in reducing the building cost we added maintenance and operating expenses, which the taxpayer also pays, we would have gained nothing but a few more headaches and an unsatisfactory building.

## UNITS OF MEASURE

Unless one really understands what is being measured in a building, one actually cannot rely too much on any unit method of comparison. A comparison of building costs in different areas of the country thus may be of little value. The five methods of measuring building costs in common usage are the following:

1. **Cost per student.** This method can be used only for new buildings, as additions rarely include a complete complement of all the various rooms utilized in the educational program. This unit is the most meaningful because it reflects not only structural costs but program as well. Its usefulness is restricted, however, because the layman generally is unaware of these distinctions. Used in conjunction with "cost per square foot," the "per student" unit indicates rather clearly the existence of differences in program.

2. **Cost per classroom.** This is the most widely misunderstood of all the units of measurement. It can be most misleading when the cost of a building is prorated in terms of the number of classrooms. Actually "classroom cost" reflects also the cost of corridors, boiler rooms, cafeterias and all of the other rooms essential to the kind of educational program offered by the school, such as special rooms for art and crafts, shop, music and remedial reading. Unless one knows what all of the "other rooms" in a particular building are, the unit means absolutely nothing.

Since the cost of a simple classroom addition does not include the cost of the auxiliary areas, the cost per classroom for an addition can be so favorable that everyone reading about it excoriates his local school board. Because it is not feasible to include an explanation of the situation each time the classroom unit of measure is used, it is virtually useless as a building cost yardstick.

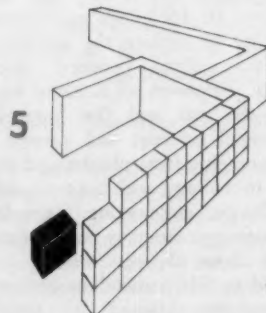
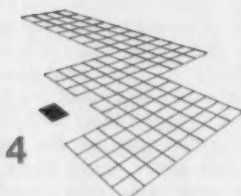
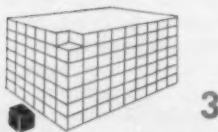
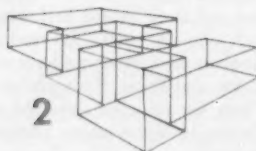
3. **Cost per cubic foot.** This method has long been one of the popular units of measuring, but it can be far enough off the mark to suggest that its use be limited to a controlled study.

An example will illustrate: If the height of an 8 foot high room is increased to 10 feet, 20 per cent is added to the cubage, but perhaps less than 5 per cent to the cost. The total construction bill will be up, but the cubage cost will be down. An architect who designs his buildings with minimum height rooms in order to cut costs will come up with a higher cost per cubic foot than will another architect who pays no particular attention to the lower ceilings. Thus, to compare cubage costs is unfair.

4. **Cost per square foot of usable space.** This method gives a good indication of the size of a building to the average person, which cubage does not. It does have its serious shortcomings, however, as illustrated by the following:

It costs so much per square foot to build a room 20 by 30 feet, or an area of 600 square feet. If the room is divided into two rooms by erecting a wall down the center, the square area remains the same, but the cost is up, reflecting the investment of materials and labor in the added wall. A further division into two more rooms causes the cost to go up still more, although the total square footage remains at 600.

5. **Cubic foot of wall cost.** This is a method that squeezes the air out of the building and gets a unit price for the unit volume of material



in it. I am not suggesting it, however, as a unit of widespread use because it takes a lot of explaining to get everybody measuring in just the same way.

In our office we have settled on the cost per square foot method, and as a check we use the cubic foot of wall cost unit.

#### INFLUENCES AFFECTING COSTS

Three influences have a dramatic effect on school building costs, and they are almost invariably overlooked when figures are being studied. These are competition, taxes and labor.

**1. Competition.** This element may affect costs as much as 10 per cent, but rarely more. When there are more contractors than construction to keep them busy, contractors sometimes will take a job at just a little above cost in order to hold their crew together and to cover their regular overhead. Also, since winter is a poor time for building, this appears to be a favorable season for bidding; contractors will shave costs to assure a job at the very beginning of the new season. Some contractors introduce innovations in material or material handling to be the successful bidder on a job.

Despite interest in obtaining the lowest school costs possible, the school administration should be interested, too, in the contractor realizing a profit on the job. Not only does our over-all economy require this, but the administration and the architect can be more critical about finishes and little defects in the building if they know that the contractor is working on a regular margin.

**2. Taxes.** In one way or another, federal taxes account for about 25 per cent of school construction costs. Taxes are hidden in the cost of everything that goes into a building. Local and state taxes, varying widely from one locality to another, will distort any comparison of school building costs over the areas that are widely dispersed.

**3. Labor conditions.** It is my contention that the biggest single item in the cost difference between the New York area and a rural area is restrictive labor practices. Even costs between metropolitan New York and Long Island, just a few miles away, vary several dollars per square foot. A superintendent told me about having movable partitions put in his office in a suburban school district. The workmen, who lived in the metropolitan area, arrived at the job around 10:00 or 10:30, put their tools away about 2:30, and charged a full day's work on the basis of portal-to-portal pay. "Featherbedding" is not re-

stricted to the New York area; the extent of it in your area affects your costs proportionately.

#### GUIDEPOSTS TO SAVINGS

Yet there are some general methods of effecting worth-while savings. Here are nine steps toward building economies that should be explored.

**1. Early purchase of site.** The first money saving item is a master plan for building construction, which involves specific building sites. A board should go out and buy even more sites and larger sites than members think they actually will need. The long-term values of land are almost invariably up, and there are sufficient examples of lack of foresight in almost every area to show how successful such a plan can be. Although this is a project difficult to sell, it has strong possibilities for savings.

**2. Building levy.** Our Canton board of education has had a building levy for the last five years, and the most recent school was completely paid for from this levy. I have been told that the savings in interest which would have resulted had the building been financed by a bond issue was \$623,000. The school levy is a most remarkable way of saving money and should be considered by every area that has sufficient taxable property to make it feasible and a long enough preconstruction time span to make it workable. Interest can consume more than 3 per cent of the educational dollar. Why not eliminate it?

**3. The program.** As stated earlier, the educational program has a major effect on building costs. Each community will determine what it expects of its schools and the type of housing it needs to realize the objectives it sets up for itself.

I would venture to say that 95 per cent of the educational job can be done in the completely self-contained classroom, especially in the lower grades. By a self-contained classroom I do not mean merely a room with its own sink, drinking fountain, and wash-room, but rather a large, flexible classroom adequate for audio-visual presentations and for group participation in music and art activities. The tremendous difference in building costs resulting from the elimination of the gymnasium, auditorium, all-purpose room, and other specialized facilities should be a matter of serious study for any school community that finds itself woefully underhoused and with low taxable values.

**4. Room size.** If all rooms are kept at minimum size, a saving in construction definitely will result. Whether it is a boon to the educational program is quite another mat-

ter, and the final decision will depend upon the educational goals a community expects its schools to achieve. Also, increases in cost are not directly proportional to the increases in area, for even with a reduction in room size there still will be the same number of doors, windows, plumbing fixtures, one heating plant, and other basic factors.

Some studies I have made indicate that a 20 per cent increase in the area of a schoolroom results in an over-all cost increase of only 5 to 10 per cent, with the lower figure appearing most likely. Since education is the end result desired, the ratio of dollar per "ounce of learning" is a more significant measure than construction dollars saved.

**5. Documents.** This form of saving is accomplished by the architect. If the documents are complete, showing all items to be included without "weasel" phrasing, bidders will be better able to use specific figures in their calculations. Also, detailed documents will make inspections much simpler and will ensure the school district's getting precisely the building that it is paying for. Then, too, expensive change orders will thus be reduced.

**6. Preplanned expansion.** When immediate construction does not include the maximum number of classrooms contemplated, these rooms should be anticipated in the master building plan. The school board might pay the architect for preliminary planning of a complete building, although ordering only working drawings for the part to be built now. While the initial structure will be somewhat more expensive because the heating plant and a few other facilities will be sized to provide for the future expansion, thousands of dollars will be saved eventually.

**7. Insurance.** Insurance costs may soon eat up whatever savings have been made on construction. For example, the economies of leaving steel exposed may be overbalanced by a higher insurance premium. Since the administration cannot keep all these things in mind, it seems best to have the architect check for any items that may result in higher insurance rates and figure how long it will take any extra cost of insurance to offset the construction savings.

**8. One-story and two-story buildings.** Our one-story buildings have averaged \$13.20 per square foot and our two-story buildings \$12.79 per square foot, or 3.2 per cent less. The two-story cost includes an adjustment for stairways, which are unnecessary in one-story buildings. As a taxpayer I nevertheless am willing to advocate



**Table 1—Variations in Schoolhouse Construction Costs Resulting From Use of Materials of Different Quality**

Quality of Materials	Contract Price	Cost per Sq. Ft.	Reduction per in \$	Sq. Ft. in %
If best materials had been used . . . . .	\$304,180	\$13.46	—	—
Case history figures (actual) . . . . .	285,800	12.58	\$ 0.88	6.5
Using lowest limit maintenance items . . . . .	277,400	12.22	1.24	9.2
Using lowest limit maintenance items and omitting certain program items . . . . .	259,488*	11.42	2.04	15.2

\*This figure not complete, since some storage units (cost unknown) would have to be substituted.

**Table 2—Decrease in Building Costs That Could Have Been Effected by Substituting Materials Less Satisfactory From a Maintenance Standpoint**

Nature of Substitutions or Eliminations	Actual Cost	Cost Decrease per Sq. Ft. of Material	Cost Decrease per Sq. Ft. of Building
Replace galvanized steel windows with painted steel . . . . .	\$ 450	.121	.019
Omit painting of boiler room piping . . . . .	75	.0036	—
Omit silicon waterproofing . . . . .	450	.0685	.019
Omit steel reinforcing of concrete block walls . . . . .	650	—	.028
Use asphalt tile instead of terrazzo in corridors . . . . .	2800	.80	.124
Use vinyl tile instead of terrazzo in corridors (alternate) . . . . .	650	.186	.028
Omit vacuum cleaning system for chalk trays . . . . .	3023	—	.133
Omit glazed tile in corridors . . . . .	800	.70	.035
Omit glazing angles (76 lights) . . . . .	152	2.00 each	.006

**Table 3—Further Decrease in Construction Costs That Would Have Resulted From Omitting Certain Facilities**

Nature of Omissions	Actual Cost	Cost Decrease per Sq. Ft. of Material or Unit	Cost Decrease per Sq. Ft. of Building
Omit 10 corridor tackboards . . . . .	\$1650	\$ 1.85	\$.073
Omit all wardrobes, teachers' storage, and sink cabinets . . . . .	5300	180.00 (ea.)	.232
Omit side coiling partition between cafeteria and gymnasium . . . . .	4700	—	.207
Omit acoustical treatment in classroom . . . . .	250	.10	.011
Omit skydomes . . . . .	3000	300.00 (ea.)	.132
Omit metal shelving cabinets . . . . .	3000	300.00 (room)	.132
Omit painted window vents . . . . .	112	2.80 (ea.)	.005

the use of one-story buildings since I believe them superior educationally.

**9. Little savings.** No one specific item alone will contribute a great deal to reducing the cost of a building, but together such items can effect worth-while economies. Examples include cutting down on the amount of exterior wall and making classrooms as wide as they are deep, or even wider.

#### SAVINGS ON MATERIALS

This part of the discussion takes the form of a case study of Charles M. Watson School, Perry Township, Massillon, Ohio. In Table 1 are shown four sets of construction costs to indi-

cate the savings that might have resulted from a downgrading or shaving of materials.

The first line of Table 1 reflects what the cost of the building would have been had the budget permitted us to use materials that would have carried the Watson school to the highest point we would have liked to reach on this building. Line 2 shows the actual cost. The remaining lines reflect downgrading to the lowest quality limit we would consider. Tables 2 and 3 detail the various possibilities.

If the best possible materials for good maintenance had been used, without regard to cost, the construc-

tion cost for the building would have been \$304,180 (Table 1, line 1). The actual cost was \$285,800 (line 2), or 88 cents (6.5 per cent) less a square foot than it would have been under the "best possible" plan. To effect the \$18,380 saving, the following substitutions were made:

Instead of 1/8 inch plastic asbestos tile (assumed to be the "best possible for maintenance"), 3/16 inch asphalt tile was selected for classroom floors. The spare heating boiler was omitted. Galvanized steel windows were specified instead of aluminum. Under the classroom wing the 4 foot by 5 foot tunnels were omitted. Classrooms were finished with concrete block.

How the building outlay could have been held down an additional \$8400 (to the \$277,400 shown in Table 1) is detailed in Table 2. The resulting construction would have represented the lowest limit our firm would consider so far as the quality of maintenance items is concerned.

Any further economies would have required the eliminating of items that would have affected the school's educational program. A listing of changes of the latter nature which might have been made appears in Table 3.

At the lowest cost figure of \$259,488 (Table 1) the structure would have been virtually stripped. Fairly generous space would have been left, but little storage or display space. The lowest limit of maintenance materials also would have been represented.

The several possible manipulations described indicate a potential cost differential of \$2.04 a square foot (Table 1). But the desirability of this attractive saving of 15.2 per cent begins to fade away when one considers the increased maintenance cost and headaches to be anticipated, not to mention the lack of proper teaching facilities for which some make-shift items would have to be provided. At any rate, even a 15.2 per cent saving represents only 1.5 cents of Ohio's educational dollar.

#### CONCLUSIONS

There are at least nine areas of schoolhouse planning in which savings may be realized.

The largest savings in schoolhouse construction can be effected before construction is started, by careful site selection and master planning. The school's program has more to do with cost than do materials. "Shaving" material costs may result in small savings, but even these may be overbalanced by resulting higher maintenance and operating costs, not to mention the implications of unduly abbreviated learning facilities. To be penny-wise and pound-foolish is not at all difficult in planning. #



# Reading for the Potential Leader and Future Scientist

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THE appearance of Sputnik I has brought great concern as to whether potentially gifted scientists are being identified and educated adequately in our schools. Many questions submitted by the superintendents regarding the rôle of reading in the education of gifted children are encompassed in the third question in our series:

3. What can the school administrator do to enrich the reading experience of the gifted pupil? How can the school best use reading instruction to foster the development of the rapid learning pupil? Of the potential scientist?

We must not assume that the problem of educating the potentially gifted student, as well as the youthful scientist, is so simple as to be solved merely by selecting the high school student of high ability and giving him "speed-up" courses, or by offering college credit for college level courses taken in high school. Nor is acceleration alone the answer.

These measures judiciously practiced will help to some degree. However, we must recognize the significant rôles that motives and attitudes play in determining the nature and extent of worth-while achievement, and we must recognize also the influence exerted on the pupil by the home and by his early childhood and school experience. Interest, motive and drive are undoubtedly factors of great potency in determining the direction and extent of the effort of potentially gifted pupils.

In an article in *Higher Education*,<sup>1</sup> November 1955, Charles C. Cole reports questionnaire responses from 32,750 seniors, considered a random sample of students in public high schools. These students also took a brief academic aptitude test. The pu-

pils who were in the upper 30 per cent on the aptitude test (9689 seniors) gave some provocative answers about their intent to go on to college or their reasons for not planning to attend.

Twelve per cent of the high scoring group indicated that the most important reason for not planning to go to college was financial need. Many others stated that financial need was an important consideration. The importance of "lack of college goal" was stressed:

*... About 25 per cent of the high scoring boys and 45 per cent of the girls cited the lack of a college goal as possibly an important reason for not continuing their education. This suggests that there is considerable validity in believing that, despite the importance of financial need, lack of motivation for college is a stronger deterrent to college going among those of high ability who do not go on to college.*

Studies of young adults who were identified as gifted children also disclose the significance of early identification and guidance. Case studies, too, often reveal the importance of early home and school guidance in determining the goals which gifted students seek as well as their subsequent success in achieving these goals. No less important is the acquisition of early attitudes which affect the mental health and stability of the gifted. For progress in our nation, we need talented persons of high ideals who are sufficiently stable and adjustable to take life's inevitable stresses in their stride.

## **GUIDANCE IS NECESSARY**

Guidance by informed and competent adults is necessary throughout the gifted child's career. In offering guidance, reading materials provide parents and teachers with a source of inestimable value. It is true that no one is really sure how many

children with high mental endowments there are in the United States today. It was estimated at one time that of the 33 million school children in the United States about 1 or 2 per cent had I.Q.'s of 130 or more. According to this estimate we had between 300,000 and 600,000 children who may be considered moderately or highly gifted. These children can be identified rather accurately by the use of intelligence tests.

However, there are other types of children whose ability and promise are outstanding. These, too, should be identified and encouraged to make full use of their abilities. Perhaps it would be desirable to consider the potentially gifted child as one whose performance in a valuable line of human activity is consistently or repeatedly remarkable.

Although we should be concerned about all types of gifted children, we should pay particular attention to those pupils who have high *abstract* intelligence. There is evidence that this group may be the most frequently neglected of all groups in special education. Yet these are the children on whom our progress in many fields of human welfare depends to a large extent. *From this group many of our most eminent scientists will probably be recruited.*

## **TREND TO RECOGNITION**

During the past few years there has been a trend toward special plans of school organization to care for the bright student. For example, special classes for the gifted pupil have been organized recently in a number of cities. We should recognize, however, that superior and potentially gifted pupils are found in almost all classrooms. Moreover, every teacher can do much to enrich the experience and to encourage the full development of such students. *Perhaps the greatest possibility for enrichment lies in the field of reading.* And this is precisely

<sup>1</sup>Cole, Charles C.: Current Loss of Talent From High School to College, Summary of a Report, Higher Education. Washington, D.C. November 1955.

the area in which such children usually excel.

As one studies gifted children, he becomes more and more impressed with the high quality and excellence of their vocabulary. In fact, superiority in vocabulary development is a fairly accurate way to identify the gifted child when he is very young.

#### HAS GOOD VOCABULARY

The vocabulary of the gifted usually continues to be remarkable. Ten-year-old Jim, for example, defined *flaunt* as meaning "to show or display, with intent to show," and he said Mars meant "god of war, planet, also a verb."

Vocabulary development is, of course, closely associated with growth in reading ability. The gifted child learns to read early. Moreover, he usually develops a strong interest in reading and reads books on many topics in the primary grades. By the time he is 9 or 10 years of age, he will frequently show pronounced interest in atlases, dictionaries and encyclopedias. He probably will read biographies, histories and books on science and geography, too. He may devour a few more comics than his friends, but he will abandon the reading of comics earlier.

Contrary to popular thought, the majority of gifted children have many and varied interests. They often have a few strong interests, but they are extremely versatile. They may experiment with physics, chemistry and photography. And they may collect stamps and other items. They are often enthusiastic observers of birds,

flowers, the stars, and animal life. Some follow the same hobbies for years, and others pursue three or four hobbies at the same time. At age 9, these children are better informed about games than are much older average children.

*The interests of the gifted offer a splendid basis on which to build rich and varied reading experiences.* And many gifted children, simply because of great versatility in their interests, need guidance and encouragement in the home and the school.

#### HOW PARENTS CAN HELP

The guidance of the reading of the gifted child should begin in the home. Parents should read aloud to their children; the children will frequently request that some books be read to them again and again. The gifted child will ask the names of words and letters seen on signs or in pictures. His parents can help greatly by supplying accurate answers to such questions. A varied assortment of picture books should be available in the home. Under these circumstances, suddenly and without instruction, the gifted child will often begin to read, sometimes before he is 5 or 6 years old. In fact, Lewis M. Terman found that fully half of one group of gifted children could read on starting school. Such children should be encouraged to read at home—without exploitation or excessive attention. In school their reading ability should be recognized, developed and directed. These youngsters should be encouraged to make contributions from their reading to class projects and should be offered

an opportunity to enjoy many books and to share their discoveries with other pupils.

Emerging interests will be noted in the gifted child as he turns to a variety of reading materials. In the first grade, John may read rapidly a number of primers, and he will also enjoy simply written stories about animals, home and school life, and everyday happenings. He will probably like the books by Inez Hogan, Dr. Seuss, Marjorie Flack, Marguerite Henry, Ludwig Bemelmans, Robert McCloskey, Lynd Ward and others.

Like most gifted children, John will enjoy reading the comics, but he will probably give them up a little sooner than typical children. He may turn with great pleasure to books illustrated by Walt Disney and may read an entire series of these books. He will soon be reading many books on a favorite subject and will extend his information by using magazines and other sources. By the time he reaches the fourth grade, he will doubtless become an avid and discriminating reader. In the middle grades, such a child may read several series of biographies.

#### NEED BALANCE IN READING

One problem teachers sometimes encounter in dealing with the gifted is the tendency of some children to concentrate too much reading in a single area, to become too specialized in their reading interests. Teachers should help each child establish a balanced program in reading different types of materials in diverse fields. This is especially true of the gifted child in a special area such as science, in which he may want to read to such an extent that his pattern of reading lacks balance.

Encouragement should be given so that gifted children will turn to poetry—an area of reading sometimes neglected by them. They should be encouraged to write poetry, too. Their products are often superior and sometimes their writing may reveal individual problems or pressing needs.

And books may be employed to help the gifted meet some problems successfully. Of course, children and youth will not often be changed greatly through reading experience alone. But reading, accompanied by discussion and related experience, may prove quite beneficial. In many cases, particular books have been used with remarkable success in helping a bright child meet obstacles to personal or social adjustment.

Another great value in the cultivation of a strong interest in reading on the part of the gifted pupil resides in the pleasure associated with "the wonderful world of books." John



Masefield once wrote: "The days that make us happy make us wise." This statement certainly applies to gifted children, who, when they have an opportunity to read materials of interest to them, turn joyfully to books for genuine and enduring pleasure.

As we have already stated, the gifted child, like all other children, meets personal and social problems of various kinds. He will need help or guidance at times in solving them. Certainly books may aid him. For example, John's indecision about following a career in science may be lessened as he reads books on vocations as well as narratives and biographies about scientists. Mary, a gifted high school senior who has expressed an interest in teaching, may be guided to read with profit a number of books about careers in teaching and in health education. Books such as Lois Lenski's "Prairie School" afford desirable reading for a younger pupil interested in teaching.

#### NONFICTION ALSO IMPORTANT

Pupils may also profit from reading factual treatments of topics, such as the nature and extent of individual differences and of abilities needed in various occupations. They may gain insight concerning other people from biographies, too.

Insight concerning personal problems as well as help in the development of an ideal may also be obtained from wise use of reading materials. A story such as Yates' "Amos Fortune: Free Man" or Forbes' "Johnny Tremain" may provide the basis for wholesome identification of a gifted child with a character who experienced and met successfully problems somewhat similar to his own.

The use of books in an effort to satisfy personal and social needs will not be limited to the adolescent period, since it should be recognized that, throughout the gifted child's school career, developmental needs transpire and recur. And throughout his career, books may be used as one means of helping him meet his most pressing problems with success.

To employ books effectively, the teacher must have an understanding of the nature and needs of gifted children. The school administrator can suggest materials on this topic and make them available to the teacher. In addition, teachers should be encouraged to study the interests and needs of the gifted. Again, the administrators can help by suggesting the use of interest inventories, anecdotal records, and other modern approaches.

Such a device as the "Northwestern University Interest

Inventory" might be used as a part of a case study made by one or two teachers. Other teachers might apply the technics suggested in "Helping Teachers Understand Children" (chairman, Daniel Prescott), American Council on Education. Discussion of the results might be scheduled for a teachers' meeting. The developmental needs of children, with special attention to the gifted, might provide the basis for another meeting in which such needs are presented and related to reading.

We have already recommended that teachers study the gifted child carefully and try to provide diversified reading to satisfy worth-while individual needs and interests. The following books may be consulted as sources of materials for pupils at the junior high school level: Roos' "Patterns in Reading" (American Library Association), and "Books for You" (National Council of Teachers of English).

One of the best sources for guidance in the use of books—old and new—to meet the developmental needs of the bright high school pupil is the annotated bibliography in E. Lenrow's "Reader's Guide to Prose Fiction." There are many other such lists for younger pupils. An excellent bibliography of this type was published as a March and April 1950 supplement to the *Chicago Schools Journal*. This bibliography contains annotated references for books arranged under 78 headings. Useful books on many topics are listed also in "The Combined Book Exhibit" (950 University Avenue, New York).

The administrator will undoubtedly desire to relate the reading program for the gifted to other efforts in their behalf. To do this effectively, he and his teachers should become familiar with procedures that other schools are following.

#### MANY ACCELERATION PROGRAMS

A practice that is gaining acceptance currently is acceleration in various guises. Dean Worcester has written a provocative book in which he endorses acceleration.<sup>3</sup> Several programs employing acceleration at the high school level should also be studied by the administrator. For example, the Ford Foundation has given financial aid to the Early Admission Program, by which capable high school sophomores may be admitted to college. In one study, these young students were found to succeed very well in college and to make, moreover, desirable social adjustments. Another Ford financed program is one in which capable students receive

college credit for courses taken in high school. The results of these experiments suggest the general feasibility and worth of providing at least a moderate amount of acceleration for the gifted pupil.

Enrichment programs are found in special schools such as the Hunter College Elementary School for gifted children of ages 3 to 11.<sup>4</sup> Major work classes are provided for gifted pupils in Cleveland. A number of cities such as Indianapolis and St. Louis have initiated recently similar classes for the gifted. Another well known plan that involves "partial segregation" of the gifted is found in the Colfax Elementary School, Pittsburgh.<sup>4</sup> At the high school level, there are specialized schools for superior students such as the Bronx High School of Science. And there are excellent science programs in the high schools of West Phoenix, Ariz.; Evanston, Ill.; Rochester, N.Y., and other cities.

Enrichment programs are being devised for gifted and talented pupils in elementary and secondary schools of Portland, Ore. In many other schools, regular classroom teachers are identifying gifted children and are devising enriched programs for them.

#### A TEACHER'S JOB

Enrichment programs require time, imagination and ingenuity on the part of the classroom teacher. Few teachers have had training in building curriculums for the gifted. But most good classroom teachers have had experience in studying the needs and interests of their pupils and in obtaining the varied materials and experiences needed to satisfy individual differences. There are books and articles on the subject of enrichment—an ever increasing number—but many teachers in overcrowded classrooms lack time and energy to translate these suggestions into concrete plans for individual pupils. As long as school enrollments continue to increase, "enrichment" programs probably will be inadequate. Some schools are providing help through consultants, workshops and various other approaches.

The future will unquestionably bring increased attention to the gifted child. Let us hope that schools will not be pressured to adopt simple panaceas of relatively little value in meeting the great and insistent need for leaders and specialists. A more defensible procedure is to follow a comprehensive developmental approach in which the education of the potential leader forms an important and integral part. #

<sup>3</sup>Hildreth, Gertrude; Brumbaugh, Florence, and Wilson, Frank: *Educating Gifted Children*. New York: Harpers, 1952.

<sup>4</sup>Fregler, Hedwig O.: *The Colfax Plan, Exceptional Children*, February 1954.

<sup>3</sup>Worcester, Dean: *The Education of Children of Above Average Mentality*. Lincoln: University of Nebraska Press, 1955.





# CHALK DUST

*Fred*

FREDERICK J. MOFFITT

## COURSES IN SPUTNIKERY

AFTER ARISING early the past few weeks to see if there are any new Sputniks wandering around the school, the Sugartown Board of Education has decreed that our present courses in science need plenty of jet propulsion. From now on the Sugartown curriculum is mandated to include a minimum of eight years of science for all high school pupils, as well as some pre-science courses in kindergarten and some remedial science for all elementary grades.

Unfortunately, since my last science teacher departed for industry and considerably more salary, I must admit that our laboratory has been padlocked. Because of budgetary conditions, I am unable to secure a replacement and it appears that I will have to teach these new courses in Sputnikery or else be annihilated.

A survey of the scholastic potentialities at Sugartown adds to my despair. Our high school student body reveals about 50 per cent potential homemakers, movie stars, and pony tails; approximately 25 per cent hot rodders, basketball heros, and others; 10 per cent scientists, and 2 per cent poets and philosophers. The remainder refuse to express any opinion.

While I am in complete agreement with the Board of Education that teaching more science is desirable, I am at a temporary loss whether to eliminate the 90 per cent expendable nonscientists, which is the way the Russian school system handles the problem, or to use them for future scientific experiments, as Mr. Hitler used to do. Hitherto, I have felt that a small supply of poets was reasonably desirable. With the increasing demand for singing commercials they ought to fit into the world quite readily. Likewise, our students in English could look forward to earning a large fortune on Madison Avenue, particularly since the unveiling of the 1958 models has revealed a need for even greater semantic outpourings. But the Sugartown Board of Education seems to have no doubt that, in the future world, everyone should be a scientist. The only possible solution I can see at the moment is to collect my incipient poets and philosophers (together with all unfortunate teachers who studied Sanskrit in college) and Sputnik

them to some other planet where they might plan a somewhat more pleasant civilization than we seem to have around here.

In all candor, I sometimes think my Board of Education at Sugartown would welcome some such solution, at least insofar as it applies to me personally. Well, I guess that's the way the cookies crumble in Sugartown in 1958.

## MAN OF THE YEAR

WITHOUT HESITATION, Chalk Dust presents the School Administrator's Award for Man of the Year to James W. Schumacher of Phoenix, Ariz. Mr. Schumacher is an Inventor, a Friend of Man, and Conservator of Superintendents.

The U.S. Patent Office has just granted Patent No. 2,809,035 to Mr. Schumacher for his invention of a walking-barrel.

The walking-barrel is a safety device useful to bull fighters, rodeo performers, school administrators, and others who earn their livelihood in jobs involving great unexpected hazards, sudden assaults, and vicious invasions.

Every school superintendent will wish to keep one or two safety barrels alongside of his desk for daily use when Mrs. Busty calls or for board of education meetings and similar hazards. It will be useful to carry to citizens committees and budget sessions.

The walking-barrel, as described in the daily press, has both ends open. The inside is equipped with rope handles so that the wearer can lift it to run or walk. If he is attacked by an infuriated opponent, he can put his feet on a shelf and pull in his neck, permitting himself to be butted, tumbled and rolled.

The barrel is humanitarian. Mr. Schumacher recommends that the shell be manufactured of aluminum and be padded outside with old automobile tires so as to protect the attacker from needless injury. Besides walking and hiding in the barrel, the superintendent can stand it on end and keep it between himself and the opponent, or he can roll it on the floor to attract attention.

Mr. Schumacher, sir, in behalf of oppressed school administrators, their worried wives, and scared children, Chalk Dust salutes you, not only as Man of the Year but as Man of the Century.

## IT COULD HAPPEN TO YOU

AMONG THE LESS happy avenues of modern self-expression is the TV interview. Interviewing technics have recently been sharpened, unrefined and popularized by a particularly annoying character named Mike Wallace, who selects victims for questioning, researches their down-fallings and produces a "story" for his palpitating public. As a former school superintendent, I often awake screamingly from awful nightmares having dreamed that Mike has honored me in such an interview.

"How is it," Mike will say, blowing smoke in my eyes, "that you ever became a school administrator?"

"That's easy," I will answer with dignity, "I liked to teach in the classroom but after my family demised from malnutrition, I decided I needed a little more money. Besides, the Merit system hadn't been discovered and I thought my chances were as good as anyone else's."

"The record shows," Mike will say pityingly, "that you studied in Columbia, in Chicago, and in Vain. Is this true?"

"Naturally," I will reply with some heat, "all educators who want a job go to Chicago or Columbia, and many of the best ones study in Vain."

Thanks to my training in dealing with parents, Rotaries and budget hassles it seems up to this point I have held my own in the exchange, and I jingle my Phi Delta Kappa key further to distract the attention of the audience. But now Mike begins to get rough:

"Couldn't you think of some easier way to make a living?" Mike will say.

"I think it is somewhat more profitable than interviewing unwilling ids in public," I will reply honestly and with great dignity.

This will undoubtedly make Mike mad.

"I have a report here," he will say, "that your chief claim to notoriety has been your ability to give the hot foot to businessmen in order to finance your school annual. Is this true or false?"

The particular crime, being common practice in most school superintendencies, I let pass.

"I also have a report from Sugartown," says Mike, "that you were fired because of insubordination, dog chasing, subversive activities, too much avoirdupois, inability to raise money, anti-social conduct, failure to pacify Mrs. Busty, and general anemia. Do you know, sir, why you were fired from Sugartown?"

"No," I reply truthfully; "do you?"

"Knowing what you now know," shouts Mike, "would you choose the same career all over again?"

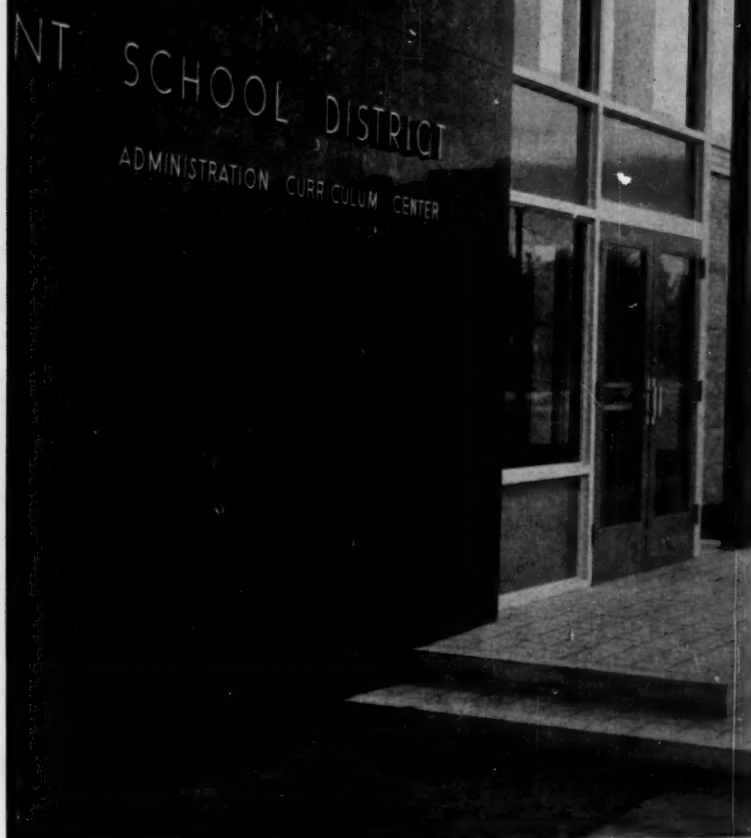
"You are darned right I would," I reply, echoing the unspoken thoughts of hundreds of my colleagues. "I know of no job on earth that is more important, more challenging, more satisfying, or more fun."

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## **SCHOOLHOUSE PLANNING**

A black marble facade flanks the entrance to the new administration-curriculum center built at Andrews, Tex. Building's architects were Herbert Brasher and Associates, Lubbock.



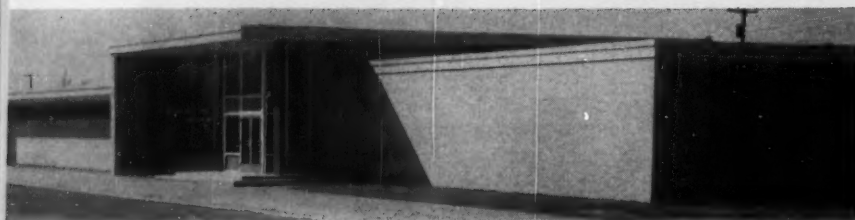
## **SERVICE CENTERS**

**Curriculum and Community Center in Texas**  
An Interview With T. A. Roach

Page 62

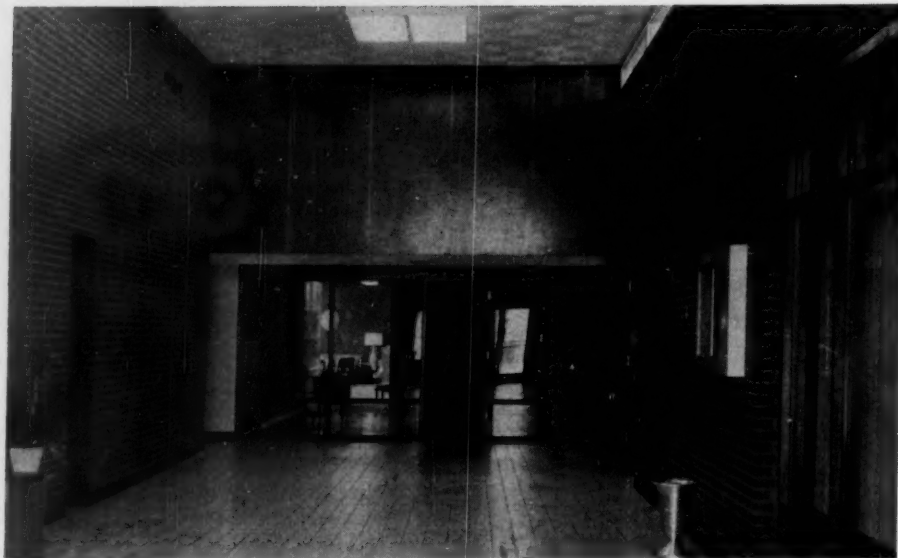
**Indiana School System Designs Own Office Building**  
An Interview With Harold Silverthorn

Page 66



Left: The Andrews administration-curriculum building also is used as a center for community meetings. This use has furthered public support of the school system by the citizens.

Right: The lobby opposite the entryway of the center leads to the curriculum and instruction divisions at rear; the door at far right leads to the superintendent's office; beyond to the board room. The door at lower right opens into the conference area.



## Curriculum and Community Center

Story and photography by

LEWIS C. FAY, Sunday Editor, San Antonio Light, San Antonio, Tex.

**A** PART from function—if architecture can be so considered—the new administration-curriculum center at Andrews, Tex., reveals an academic philosophy rare in the field of school headquarters construction. It seems to be this: Beauty is not only compatible with, but essential to, the academic life.

This new building, functional though it is, impresses the observer, first of all, with its beauty of design and its tasteful use of color inside and outside.

Adapting the building to use as a community center, as well as school headquarters, moreover, has furthered public understanding and appreciation of the aims of the school system and has contributed to public support for the program of Supt. T. A. Roach and the board.

One enters the Andrews administration-curriculum center through doors

framed in yellow, sharply contrasting with the black marble facade to the left of the front doors.

Thence one proceeds through an attractive lobby, finished in red brick and walnut and fir panelling, to the various centers that compose the functional aspects of the building.

To the right of the front entryway is the superintendent's office; to the left, the reception desk, a long L-shaped enclosure containing PBX equipment, mail boxes, and various other facilities for the operation of the building.

### CONFERENCE AREA PROVIDED

Through the superintendent's office, one arrives at a smartly arrayed snack bar and workroom and, beyond, the board room. This board room is linked with a large conference room by an almost wall-width doorway. Although the Andrews board eschews executive

sessions as unworthy of public confidence, large folding doors can be used to separate board room and conference room, if desired.

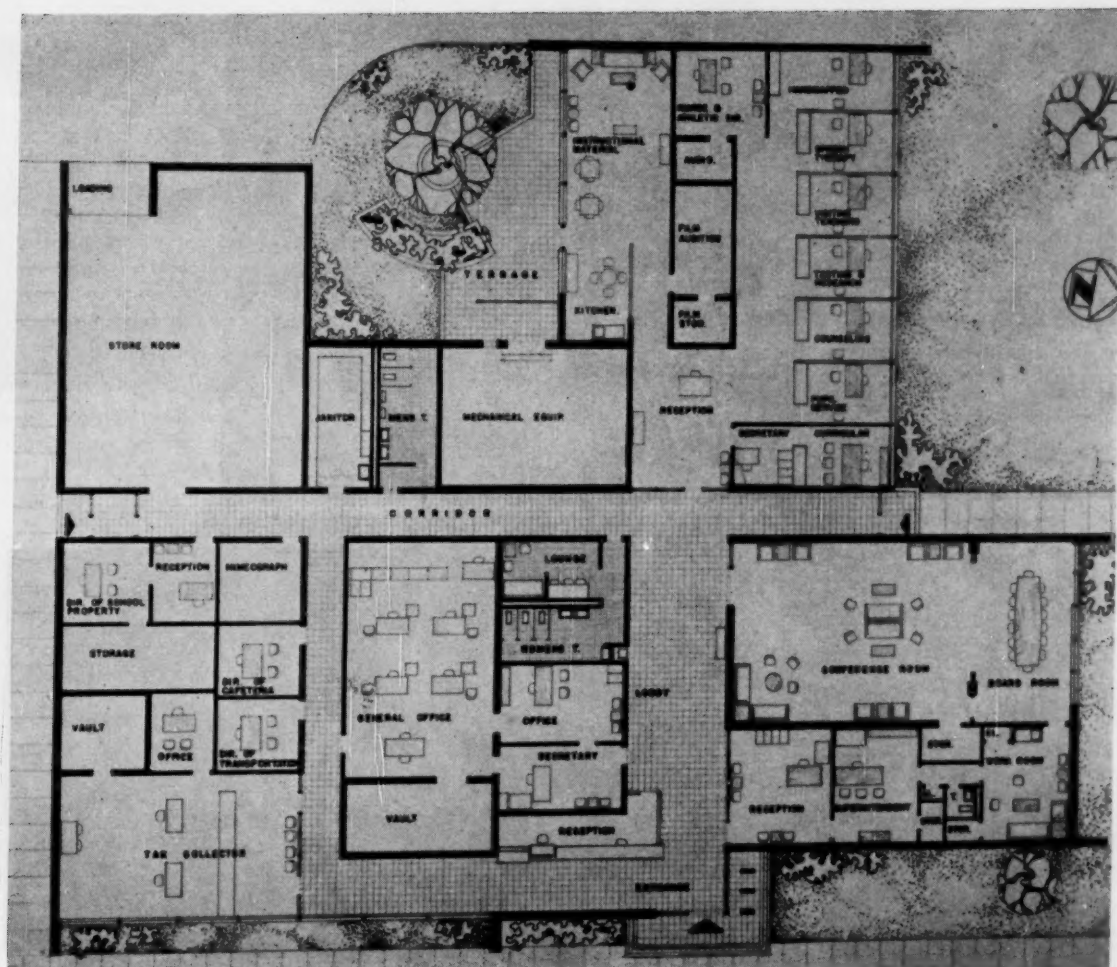
### HANDY SNACK BAR

The conference area also opens into the snack bar. There citizens may relax while discussing school or other community affairs.

One walks from the conference room back into the main lobby, midway to the rear of the building, and proceeds therefrom through a central entryway to the library, the curriculum center itself, and various other offices.

But, aside from the beauty and restful atmosphere of the center, it is in its functional use that Mr. Roach, the board, and the architects—Herbert Brasher and Associates, Lubbock—have accomplished most. Teachers and lay leaders contributed ideas and opinions.

(Cont. on p. 64)



Above: The floor plan shows how arrangements were made for administrative services, community use, and storage. Below: The meeting and conference area, foreground, can be separated from the board room by the folding door.

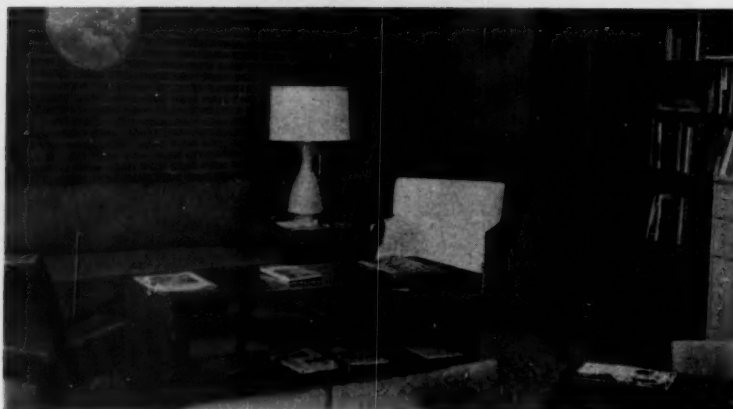






Left: Entrance of the library is a riot of color transmitted through colored plastic panes set into the wooden space divider at left.

Right: The library is furnished with leather settee and chairs. Magazines are within easy reach on the table, rather than being stacked on the shelves. In one corner is a small counter for serving soft drinks, tea and coffee.



In giving their preconstruction orders to the architects, the board and school administrator made it clear that this was not to be just another office building to house the top brass. They wanted, they said, a practical well integrated, nonmonumental, completely air conditioned building that would also serve as a curriculum center. Warm and informal, the building nevertheless was designed to provide maximum efficiency and coordination between adjacent work areas and various offices.

Office space was to include rooms for the superintendent, business manager, director of instruction, tax assessor-collector, and the directors of school properties, cafeterias, athletics, health and other special pupil services. Too, space must be provided for a central receptionist, mail service, and a PBX telephone system.

#### **PUBLIC IS WELCOME**

A spacious board room was to be separated from a larger conference

room by folding doors so that the public would feel welcome at board meetings.

The receiving area for supplies and equipment was to be large enough to house temporarily all incoming shipments until invoices could be checked and supplies routed to individual buildings. This area was to be adjacent to the office of the director of school properties, who is in charge of all incoming equipment and supplies.

#### **ADAPTABLE TO NEEDS**

The curriculum center area was to be attractive and well appointed, the architects were told. It was to include a large display area for teaching materials; a place for the teachers to browse and lounge; a reading center with professional literature, films and periodicals; a projection room where teachers could view visual aid materials; a snack bar for serving coffee and soft drinks, and an outside terrace and planting area for relaxation. (See floor plan.)

The building, designed to provide the foregoing features, contains 17,163 square feet and cost \$199,526. Of brick and tile, it is supported by a reinforced concrete foundation. Load-bearing walls support a roof framed of steel; the roof deck is poured gypsum. Ceilings are of striated fiber glass acoustical tile.

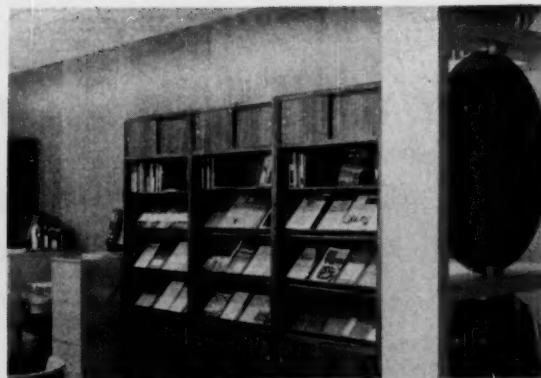
#### **VARIETY IN FLOORS**

Quarry tile provides floor covering for the lobby and corridors; carpeting covers the floors in the offices of the superintendent, business manager, and director of instruction, as well as the board and conference rooms and the curriculum center. Other office areas have vinyl floor covering.

Of the 204 teachers constituting the Andrews staff a hundred or so of them are within five minutes' walking distance of the administration-curriculum center. Others can reach the center by a five-minute drive. Teachers are encouraged to use the center's facilities at various times during the work-

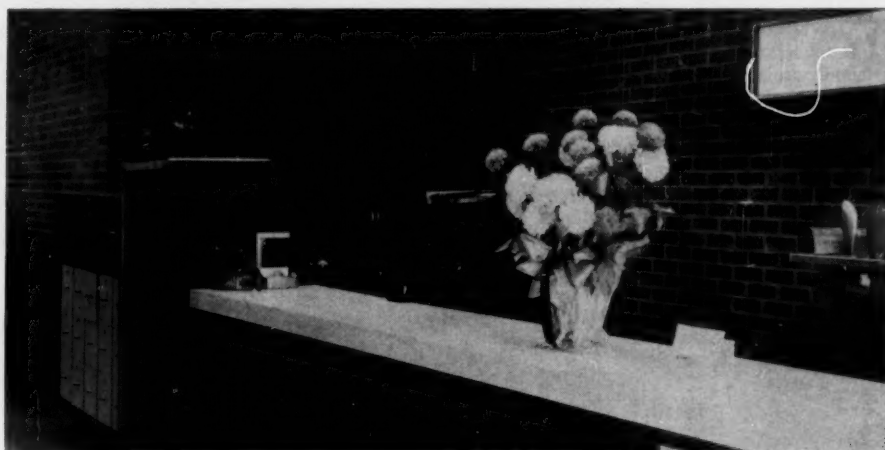


Above: Movable wall sections are employed in the curriculum center to form the individual conference rooms.



Above: Professional journals are neatly arranged in the library for use by teachers during week and on Saturday.

Right: Mail boxes flank the reception desk in the entryway of the center. A PBX telephone system is also part of the reception room. The lobby is finished in red brick and also walnut and fir panelling.



ing day and on Saturdays at their pleasure.

Function achieves its highest flexibility in the informally arranged conference room adjoining the board room. Five separate living room-type areas can be used separately for small discussion groups. Or the whole can be combined, and with folding chairs and divans already available, provide seating for a large citizen group.

The offices of the superintendent, business manager and tax assessor-collector—all closely associated with the public—are readily accessible at the front of the building. Directors of transportation, cafeterias and school properties have offices toward the rear of the building near the concrete, garage-type area for receipt of all incoming mail, supplies and equipment.

In the curriculum center portion of the building, flexibility achieves another high point. Movable partitions permit expansion or reduction of office space, in addition to the permanent

offices and facilities. Here the directors of such schoolwide services as speech therapy, counseling and guidance, testing and research, and handicapped child training, find office space.

#### LIBRARY MADE INVITING

The concept of beauty, as envisioned at Andrews, is perhaps best evidenced in the library and reading center. Here professional journals are displayed on open racks, rather than being stacked inaccessible in a corner. Instead, in one corner is a tiny soft drink and coffee bar. Attractively furnished with leather settee and chairs, the library opens, through a window and framed entryway, onto the outdoor terrace and planting area. Landscaping is still going forward, but once completed, the area will be, as Mr. Roach states it, "so inviting that teachers will not be able to stay away from it."

This administration-curriculum center with its emphasis on both beauty

and function is a reality at Andrews because, as Supt. Roach admits, "the school district has adequate financial resources to pay the cost."

The assessed valuation of \$120 million for 1957-58 is approximately 95 per cent oil properties; a tax rate of \$1.61 per \$100 valuation has been set for this school year.

#### COMMUNITY APPRECIATION

But, going a bit beyond the superintendent's realistic appraisal, one must recall that many communities well able to afford such facilities do not have them. The administration-curriculum center, together with Andrews' other outstanding school buildings,\* represents a healthy growth of public awareness of the schools' cultural rôle—where the administration and the board leadership have prepared the ground for such community awareness to grow. #

\*Among them: Split-Level Classrooms for Beginners. *The Nation's Schools*. 89:66 (June) 1957.

# School System Designs Own Office Building

Flexibility, speedy construction, moderate cost, and low maintenance expense among goals achieved by planners of new administration center at Gary, Ind.

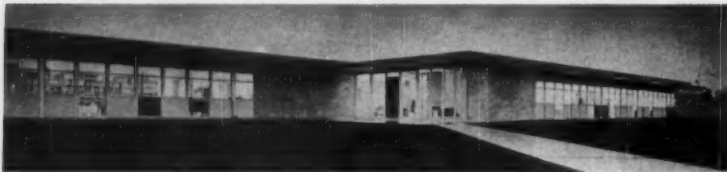
LEO E. BUEHRING

**T**O WHAT degree does experience in schoolhouse construction qualify a school administrator for planning the headquarters building of a school system? How are the two sets of problems similar; how do they differ? What are the rules for building a good, functional school service center? What are the do's and don'ts to be observed during the planning.

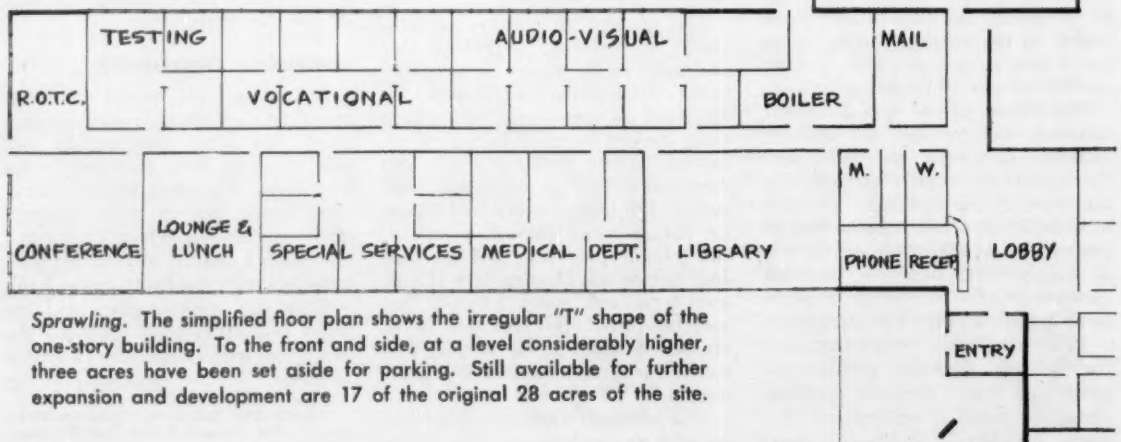
Some answers to these and other questions have evolved out of months of planning and a half-year of use of the \$378,000 school service center at Gary, Ind. The building was designed to house seven divisions of the administrative staff, totaling 110 employees, and to provide staff food service. The departments formerly were located in three different places.

"This building may not be the last word, but it is a functional structure in which we have used a lot of new ideas," says Harold Silverthorn, who is the director of buildings and properties and newly elected president of the National Council on Schoolhouse Construction.

Supt. Alden H. Blankenship and the board of school trustees allowed a

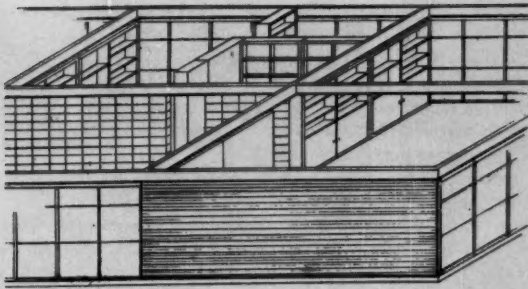


*Flexible.* This is a night view of the main entrance of the Gary school service center. All walls of the center are nonload bearing. The steel panels are white, light blue, and tangerine. A sun filtering glass is used where it is necessary to augment protection provided by the roof overhang. The building was designed by David J. Katz, architect, Gary, Ind.



*Sprawling.* The simplified floor plan shows the irregular "T" shape of the one-story building. To the front and side, at a level considerably higher, three acres have been set aside for parking. Still available for further expansion and development are 17 of the original 28 acres of the site.





**Functional.** Above: The drawing shows post and beam construction of building. Walls, window walls, adjustable partitions and shelving dividers are fitted into the steel frame. Right: Offices were created by using cabinet dividers mounted on header strips and movable asbestos panels.



free hand to Architect David J. Katz of Gary, the building committee staff headed by Mr. Silverthorn, and the educational and planning consultants. Thus the new type of educational office building, with many more complexities than a school structure, was completed in seven months, less time than a school building takes, and for less money (\$318,000 plus \$60,000

for architectural fees, air conditioning, and site improvement, plus cost of site, furniture and equipment).

Within the building's 21,000 square feet are housed eight secretary pools, 42 private offices, four conference rooms, and six special areas. The special areas are a small auditorium, an instructional materials center, a professional library, a lunchroom-lounge,

a machine accounting room, and the purchasing department.

The one-story, steel frame structure is located on a 28 acre site some 10 minutes' driving distance from the business district. Six acres have been landscaped and another 3 acres set aside for parking of 300 automobiles. The parking areas are around the perimeter of the grounds and do not obstruct the view.

Walls throughout are nonload bearing, with portions of exterior enclosures fashioned of 6 inch SCR brick finished on both sides, thus providing both outside and inside wall finish in one operation. The remaining space is enclosed with movable window walls of standard steel sash. The finish is permanent, thus decreasing maintenance cost.

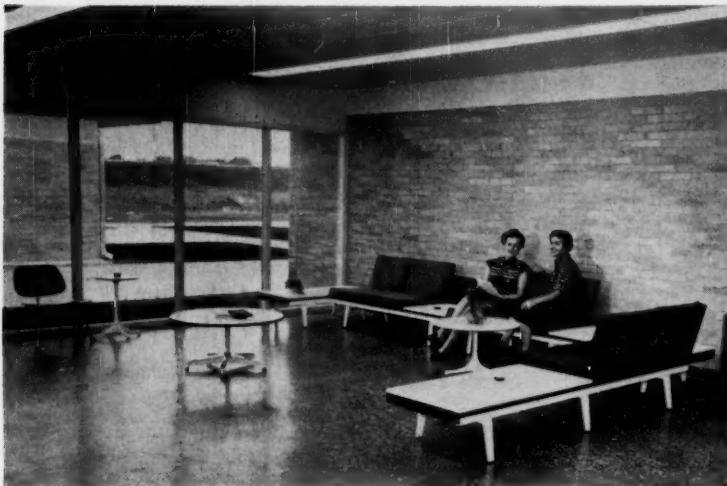
A limited number of the interior walls are concrete block. The remaining space is sectioned by movable, insulated asbestos board panels and cabinet wall dividers bolted to header strips. The wall sections can be unbolted in 15 minutes and moved into new positions to meet changes in space requirements.

Combined in the steel deck are a structural roof and a finished, acoustical ceiling. This system reduces the dead load, the number of installation operations, and the cost. The terrazzo floor was poured onto the concrete floor slab across the entire length of the building before interior walls and partitions were put in.

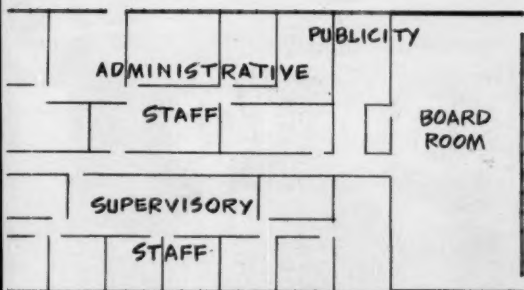
Mechanical refrigeration and heating are supplied by the same unit ventilator equipment. Electrical and telephone outlets are within 4 feet of any future partition change.

#### SEQUENCE OF PLANNING

The final construction blueprint for the Gary school service center evolved out of five carefully conceived planning stages: (Cont. on p. 68)



**Inviting.** The lobby is fitted out with contemporary furniture and doubles as a lounge. Colors used here are those used throughout the building: tangerine, black, buff and white. The switchboard and telephone equipment room are near.



1. *Research, consulting.* The somewhat limited research done in this field was reviewed, and professional magazine articles, pamphlets and books were studied. Use was made of the services of consultants: N. L. George, assistant superintendent, Oklahoma City, planning and design of facilities; Charles D. Gibson, California State Department of Education, lighting, and Wallace Ruff, University of Oregon, employed by the architect to do the architectural landscaping.

2. *Inventory of services.* Employees to be housed and facilities to be provided in the proposed building were identified.

3. *Tabulation of need.* Each department head was interviewed by the architect and the director of buildings and properties to ascertain the space needs and arrangement of the seven divisions of the administrative staff: finance, building and properties, instruction, vocational and adult education, auxiliary services, school-community relations, and R.O.T.C. Under the general supervision and with the advice of the superintendent of schools, specifications were prepared from the information given.

4. *Preliminary plans.* Sketches within the budget limitations were prepared by the architect. This took about a month.

5. *Evaluation.* Preliminary plans were taken back to each department head and checked against the proposed activities of each department. Full-scale mockups were made, and temporary walls were moved back and forth to determine how well various space arrangements coincided with expressed needs. On the basis of this study, certain room sizes were reduced from the original.

Not until the preceding five steps had been completed and the results

scrutinized did the architects begin the finished drawings.

After eight months of research, consultation, rechecking of plans, working with mockups and actual construction, plus occupancy since August 1957, Mr. Silverthorn can counsel others with similar building problems.

Underlying all other lessons he learned was this: Keep the building as flexible as possible, so that space can be altered easily and quickly to meet changing needs.

Mr. Silverthorn makes 16 specific recommendations.

#### NOTE THESE STEPS

1. *Walls.* A school office building requires about twice as much wall space as does a school. But there should be as few interior walls as possible. Since knocking out partitions takes time, the more unenclosed space the better. In certain instances the use of sound screens to divide a large open area will serve as well as movable walls. Sound conditioning is extremely important in any large area. Room walls should be insulated.

2. *Utilities.* Creative engineering pays off here, for 10 times as much electrical equipment and two times as much heating equipment is required in an office building as in a school. Keeping the building flexible involves more than utilizing movable walls. Lighting fixtures, heating units, electrical outlets, and similar facilities must be so installed that they will serve equally well with changes in room size. Fixtures, including shelving, should also be both movable and adjustable.

Electrical outlets should be arranged so that power and light will be accessible every 4 feet. The outlets can be hidden in the floor and broken out with varying needs. Three-unit wall

outlets cost little more than the two-unit type. (The in-floor spacing of electrical outlets at Gary added \$1 a square foot to the building cost, but Mr. Silverthorn considers the expense the best investment he made for the future.)

3. *Telephone.* With any change in desk location it is important not to limit the telephone service or make it awkward. Equipment that will expedite calls should be installed. Proper atmospheric conditions must be kept in the telephone equipment room.

4. *Floor.* One continuous area of flooring should be laid before a single interior wall or partition is installed. Thus when room sizes are changed by moving the walls, the floor will not be affected. With the diversified type of operations going on in a building of this type, the floor must be of good quality. Use of monolithic terrazzo at Gary involved an additional cost of \$8000, but Mr. Silverthorn expects to pick up the difference in a relatively short time in the form of maintenance savings.

5. *Ceiling.* An 8 foot ceiling is sufficiently high and provides a more homelike atmosphere.

6. *Corridors.* Wide passageways are not required; however, corridors should not be narrower than 4 feet.

7. *Lobbies.* If fitted out with good and colorful furniture, the lobby can double as a reception room. This conserves space by eliminating the need for waiting rooms for individual offices and gives visitors a favorable first impression.

8. *Lunchroom.* If food is prepared outside, kitchen equipment can be held to a minimum, leaving more space for tables, chairs and lounges. This permits use of the room as a lounge throughout the day. If disposable

*Spacious.* By setting up eight stenographic work pools, space was saved and the cost of construction was reduced. Borrowed light helps to illuminate inside areas and provides a more cheerful atmosphere for members of the staff.

*Divisible.* Movable folding doors bisect the auditorium to accommodate the attendance at the different meetings held here. Board meetings, P.T.A., and other groups that meet in building make adequate conference space necessary.



The NATION'S SCHOOLS



**Efficient.** No, the corridors in the service center are not banked by files. Each of the "drawers" shown here is a mailbox to which authorized persons have access without disturbing personnel at work in the adjacent mailroom.



**Economical.** This relatively small lunchroom serves 110 staff members. Kitchen equipment is held to a minimum so that, during periods of the day when it is not being used as a lunchroom, this area can serve as a lounge.

table service is used, cost is kept to a minimum. (Including cabinets, counters, water heater, and refrigerator, the equipment cost at Gary was less than \$1000.)

**9. Conference room.** Board meetings, P.T.A. and other group sessions, assemblies and consultations make adequate conference space important. But the larger the individual offices, the less conference space is needed. The natural tendency is to have smaller groups meet within the office, provided walls are properly soundproofed.

**10. Washrooms.** Proportionately fewer washrooms are needed than in a school building. Seven stalls can accommodate 100 adults without taxing the facilities at any one time.

**11. Restrooms.** At least minimum restroom space should be provided for both men and women. An unused conference room is not a suitable resting place for an employee seeking privacy.

**12. Supply storage.** Proportionately more custodial help is required than for a school of like size, one of the reasons being that greater demands are made upon the time of the custodian. Therefore, custodial personnel needs more space. A school office building housing 100 persons requires no less than 600 square feet for storage of supplies. With educational needs pressing for more space, it is easy to give way here; when this happens, Mr. Silverthorn says, all departments that are housed in the building will suffer.

**13. Site.** With today's mobile population, it is not imperative that a school

administration center be located in the heart of the business district. It may be in a suburban area if this location will place the structure more centrally with reference to the schools.

A generalization is that not fewer than 10 acres of site should be allowed for a building housing a staff of 100 persons. A 15 acre plot of ground, including parking space, is preferable, as eventually shops and a warehouse may have to be added and the future may call for some expansion.

**14. Parking.** One parking space for each three persons attending an event in the school auditorium is adequate. But a separate parking space should be allowed for each person attending a meeting at a service center, since participants usually arrive alone. In addition to spaces for employees' cars, a minimum of 2½ acres of parking space should be allowed for meetings, so arranged that it will not obstruct the view of the building.

**15. Landscaping.** Money spent for architectural landscaping is a good investment, says Mr. Silverthorn. It not only assures a better working environment for employees but sets off the headquarters building in a symbolic manner, indicating that the community values its school system highly.

**16. Design.** If land is available at a reasonable figure, the service center should be a one-story building. To go higher not only increases cost but reduces flexibility.

Some department heads are inclined to overstate their space requirements. Yet these persons, said Mr. Silverthorn, are not the chief cause of the

planner's trouble, since they can be spotted easily. Of greater concern is the staff member who initially understates his needs, either because of reticence or because of unwillingness to take the time to arrive at the proper figure, and who later finds himself cramped. The job of the building planner is to make certain that all staff members have been provided for adequately without any waste of space.

#### IN RETROSPECT

After the lengthy counseling and scientific planning involved, nothing less than perfection might be expected at the Gary School Service Center. But while members of Gary's administrative staff are proud of their building, Planner Silverthorn says that even from the vantage point of less than seven months' use there are a few matters he would handle differently were he to start from scratch tomorrow. Fortunately, the flexible planning of the present structure will make possible most of the desired changes with no greater effort than unbolting partitions or knocking out a section of nonload bearing wall. Changes he might make include:

Less space devoted to conference rooms, since small groups frequently meet in private offices.

Restroom space and more lounge space, especially for women employees. The combination lunch room-lounge is working out all right but it does not provide desirable privacy.

Increased storage space for custodial help and supplies.

Fewer enclosed spaces, with greater use made of secretarial pools. #



# Are "Union Shop" Contracts for Teachers Legal?

## ANOTHER ROUND IN THE MONTANA COURT BATTLE

LEE O. GARBER

Director, Educational Service Bureau  
University of Pennsylvania

ON DEC. 4, 1957, a district court in Montana rendered a decision of more than passing interest because it involved the question of the legality of a collective bargaining agreement between a school board and a teachers union.<sup>1</sup>

One evidence of its significance is to be found in the fact that the Montana Education Association, the National Education Association, the American Federation of Teachers, and the Montana State AFL-CIO petitioned the court to intervene, and their petitions were granted.

The real significance of the court's decision is that a school board, when entering into a union shop contract, cannot agree to discriminate, salary-wise, against tenure teachers who refuse to join the teachers union.

### MAY APPEAL DECISION

Before considering the facts of the case and the decision, it should be repeated that the court making this decision was one of original jurisdiction, and its decision is appealable. At this writing, however, such an appeal has not been taken, but it can be assumed that it probably will be.

If such an appeal is taken, the decision rendered by the higher court will be reported in these columns. Only because of the nature of the question involved and the interest this case has aroused in professional education circles is it reported before it has been passed upon by a higher court.

On April 2, 1956, the school board of School District No. 1, Silver Bow County, Montana, entered into a contract or "master agreement" with Butte Teachers Union, Local 332,

American Federation of Teachers (AFL-CIO), in which the board recognized the union as the exclusive bargaining agent or representative of the teachers. This contract may be considered to be a union shop agreement. It contained sections relating to salaries and working conditions of the teachers. One such, a check-off section, provided that the board would deduct certain amounts from the salaries of all teachers authorizing it to do so and turn over to the union all monies so collected. Another, referred to as the "union security" section, read as follows:

"As a condition of employment all teachers employed by the Board shall become members and maintain membership in the Union as follows:

"(a) All teachers now employed by the Board, who are not now members of the Union, must become members of the Union on or before the 4th day of September 1956, and shall maintain their membership in the Union in good standing as defined by the constitution and by-laws of the Union during the term of their employment.

"(b) All teachers now employed by the Board, who are now members of the Union, shall maintain their membership in the Union in good standing as defined by the constitution and by-laws of the Union during the term of their employment.

"(c) All new teachers or former teachers employed by the Board shall become members of the Union within thirty (30) days after date of their employment and shall maintain their membership in good standing as defined in the constitution and by-laws of the Union during the term of their employment.

"The provisions of this Union Security Clause shall be adopted as a Board Rule and shall be a condition

of all contracts issued to any teacher covered by this agreement.

"Any teacher who fails to sign a contract which includes the provisions of this Union Security Clause and who fails to comply with the provisions of this Union Security Clause shall be discharged on the written request of the Union, except that any such teacher who now has tenure under the laws of the state of Montana shall not be discharged but shall receive none of the benefits nor salary increases negotiated by the Union and shall be employed, without contract, from year to year on the same terms and conditions as such teacher was employed at during 1955-56."

### EIGHT TEACHERS FAILED TO JOIN

When it came time to give teachers new contracts in the spring of 1956, the contracts handed out by the board specified that the teachers would join the union and subscribe to the "union security" clause. Eight teachers, all of whom were on tenure and all of whom were granted increases in salaries, signed their contracts, but, in so doing, deleted from them those sections relating to membership in the union. On May 7, 1956, the board met and considered the situation. It adopted a resolution rehiring these eight teachers at the same salaries they had received the preceding year until such time as any of them might see fit to sign the contract originally given her, in which case, beginning with the date of signing the contract, such a teacher would receive the salary originally offered her.

The effect of this was to deprive each of the eight teachers of an average salary increase of some \$300. In other words, those with equal training

<sup>1</sup>Hilda Benson et al. v. School District No. 1 of Silver Bow County et al., No. 48609. (A decision rendered in the district court of the 2d judicial district of Montana, in and for the county of Silver Bow.)

<sup>2</sup>Butte Daily Post, Thursday, Jan. 31, 1957.

and experience who signed the contracts containing the union clause would, for the school year 1956-57, receive salaries approximately \$300 in excess of those who refused to sign the contracts including such a clause.

The eight teachers returned to their jobs when school opened in September 1956, and, on November 7, initiated this action asking the court to void the "union security" clause and to require the board to cease discriminating against them and to pay them according to the salary schedule adopted April 2, 1956. The board contended that, until the teachers signed the contract containing the union membership clause, it was justified in keeping them on at their former salaries.

The court ruled in favor of the eight teachers and against the school board. Of the salaries it said:

"IT IS ORDERED ADJUDGED AND DECREED that the defendant school district and school trustees enter into contracts in writing with each of the plaintiffs for the school year 1956-57 which contracts shall not require membership in Butte Teachers Union or in any other organization, providing for salaries under the salary schedule adopted by the trustees of said school district on April 2, 1956, and to pay and compensate the said plaintiffs in accordance with such contracts and the said salary schedule for the school year 1956-57 and to pay to the plaintiffs forthwith . . . such amounts as, together with such payments as have already been made to plaintiffs for their services for the school year 1956-57, shall compensate each of said plaintiffs in accordance with such contracts and the said salary schedule so adopted by the trustees of said school district on April 2, 1956. . . ."

It reasoned that the teachers were on tenure under the laws of the state of Montana and that the board was without authority to discriminate against them in matters of salary because of their refusal to become members of the Butte Teachers Union.

With respect to the "union security" clause it said that this "portion of the 'Master Agreement between the Board of School Trustees and Butte Teachers Union' made and entered into April 2, 1956, is null and void, and of no effect whatsoever insofar as it relates to and discriminates against teachers who have tenure under the laws of the state of Montana, and particularly the plaintiffs. . . ."

Finally, the court stated that the individual members of the board, who, in addition to the board in its corporate capacity and the teachers union, were named defendants, acted

in good faith and no damages were recoverable from them personally. But, it held that the defendant school district should pay the costs and also the sum of \$2000 to the plaintiffs for a reasonable attorneys' fee.

#### SEVERAL QUESTIONS ANSWERED

In evaluating this decision, it must be remembered that it is the decision of a lower court and not necessarily final. It may, and probably will, be appealed. The reader is also cautioned against generalizing too broadly on the basis of this decision. The court did not rule out the possibility of a union shop contract between a school board and a teachers union. This

question was not before the court, and the court was without reason for ruling on this question. Likewise, it did not rule that the "union security" clause was illegal. It only said that this clause was "null and void . . . insofar as it relates to and discriminates against teachers who have tenure . . . and particularly the plaintiffs. . . ." How the court would have ruled had plaintiffs not been on tenure cannot be predicted.

Several other questions involving board-teacher-union relationships are unanswered. Numerous other cases probably will have to be decided before this relationship is understood with any degree of certainty. #

## Noncertified Staff Not Likely to Gain Further Fringe Benefits, Research Findings Indicate

LOS ANGELES.—More than one-half (55.4 per cent) of administrators of school systems in major U.S. cities doubt that their districts will further liberalize fringe benefits for noncertified (classified) employees within the next five years. This is the outlook, even though three-fourths of the schoolmen either believe that presently their districts are not ahead of business and of government agencies in their communities or have no opinion on the subject.

This information is culled from data received in answer to a questionnaire distributed as part of a doctoral study in progress at the University of Southern California. Preliminary returns from the survey, made to ascertain national trends, were announced to members attending the annual convention of the Association of School Business Officials of the United States and Canada by Edgar C. Egly, Arcadia, Calif.

#### LENIENT WITH SICK LEAVE

The 60 question survey sheet, sponsored by the personnel research committee of the A.S.B.O., was sent to all school districts in 109 U.S. cities with a population of 100,000 or more. Some 83 per cent response had been received by convention time, and additional replies were expected. While no conclusions had been reached, pending a detailed analysis of the figures, certain "generalizations" were reported concerning 19 of the 60 queries. The following paragraphs summarize additional preliminary findings:

Noncertified school employees are allowed time off for personal reasons, such as business or medical appointments, without loss of pay by 50 per

cent of the schools, but only 8.4 per cent allow such time for Christmas shopping.

No deductions are made in 86.7 per cent of the systems for time off because of illness of members of the immediate family, and in almost 87 per cent of the cases allowances are made for bereavement leave, ranging from one to upward of nine days. In many cases bereavement is charged to sick leave. The latter, generally with full pay, is the arrangement in 92.7 per cent of the schools reporting.

#### HAVE PAID VACATIONS, HOLIDAYS

Of the systems some 97 per cent have paid holidays, exclusive of vacations, ranging from four to more than 13 days. Annual vacations are allowed noncertified employees in at least 94 per cent of the cases, with 6 per cent of respondents failing to answer this question. Maximum vacation time allowed after one year of employment ranges from 10 to 29 days, with the largest number receiving from 15 to 19 days. Longer vacations are in part recognition for 10 years or more of service. Only 18 per cent of the districts permit a carryover of vacation time.

Payment is made in whole or in part from district funds for these other fringe benefits: workmen's compensation premiums, 36.1 per cent of the systems; retirement program, 33.7 per cent; hospital, medical and surgical insurance premiums, 10.9 per cent; life insurance premiums, 8.4 per cent.

Voluntary payroll deductions are made for credit unions by 24.1 per cent of the districts and for employee associations by 17 per cent. Some 64 per cent are participating in the U.S. savings bond payroll savings plan.

## ***The American High School Has Come of Age***

**and will be a dynamic force in  
perpetuating and refining our free society**

**LLOYD S. MICHAEL**

*Superintendent, Evanston Township High School, Evanston, Ill.*

THE HIGH SCHOOL IN A CHANGING WORLD. *Thirty-sixth yearbook of the American Association of School Administrators, N.E.A., 1201 Sixteenth Street, N.W., Washington 6, D.C. 1958. Pp. 368. \$5.*

IN RECENT months education has become a matter of prime urgency to the nation. Russia's scientific education has dramatized, as perhaps nothing else could, the gap between our country's educational needs and its educational effort.

The American high school appears to be the focus of this concern as communities throughout the country are examining all aspects of current secondary education in an attempt to chart a future course by finding new ways to meet new needs. The recognition grows that we must have first-rate high schools in all districts if they are to meet the demands made upon them and provide an appropriate and challenging education for all youth. A yearbook about secondary education is most timely as communities seek better answers to the unprecedented problems that face their high schools.

### **UNCHANGED AFTER SPUTNIK**

The commission held its final meeting in late September at which time the yearbook was approved. A few days later Russia launched her first earth satellite, and the American people began a new and critical appraisal of their educational system, particularly their secondary schools. Critics have since hurled charges of failure and weakness and have sounded alarms for drastic reforms, even to the adoption of the pattern of Soviet education.

In the light of these dramatic happenings, what modifications and revisions were made in the yearbook? What new tasks were proposed and what new designs were advocated?

Would a different book have been produced had the commission begun its deliberations after the two Sputniks? These are proper questions.

The chairman of the commission answers them in the foreword: "We find no reason for changing interpretations or recommendations. . . . The proper business of American schools is not to change course in confusion at every fresh alarm but, in full awareness of the tensions and the promise of our times, to pursue with foresight and resolution the historic purposes to which our people are committed. . . . The way of progress lies in doing more of the good things already under way, in refining procedures now in the pioneering stage, in making available to more students the advantages currently enjoyed by those enrolled in the best of our schools."

The commission was charged to take a new look at secondary education and to consider what its rôle should be in a changing world. In its deliberations many questions were raised concerning the direction and destiny of the high school.

What is the impact of current forces upon the secondary school? What trends and influences in our society will control the school of the future? What are the major problems facing the modern school? What are the reasonable expectations of the school on the part of youth and society? What are the primary tasks of the future school? How can the school provide a balanced program of general and specialized education? How can the new program be staffed and housed? How can the school most effectively reach the needs of all youth? What is the leadership rôle of the administrator and the important interrelationships and responsibilities of superintendent and principal? What resources, professional, human and material, can

be made available to the school in the accomplishment of its goals?

Readers of the yearbook will find proposals and recommendations that may contribute to the improvement and redirection of secondary education. They will not discover spectacular schemes and panaceas.

The central theme of the yearbook is that the American high school has come of age. During its years of immaturity it was faced with the tremendous responsibility of providing suitable educational opportunity for all youth. In most communities the goal of universal youth education has been accomplished; approximately nine out of 10 young people between the ages of 14 and 17 are now in school. No other nation has aspired to such educational achievement. Yet this unique emphasis upon the education of all youth has revealed certain shortcomings and weaknesses in many of our schools. Low standards, lack of competition and incentives, inadequate and inappropriate offerings for different levels of ability, "snap" courses, and poor instruction are the prices we are paying in too many schools for the attainment of nearly universal secondary education. Schools of the future must eradicate these limitations by better staffing, enriched and varied programs, new services, and improved facilities.

### **THE OBLIGATIONS OF MATURITY**

Great responsibilities and obligations of maturity confront our secondary schools. The challenge of the future "is the unfinished business of sustaining and diffusing the many achievements of the modern school and of moving forward to complete an effective program of universal youth education. This program must provide the kinds and quality of educational experiences that will develop effectively all the abilities of all American youth." Steps must be taken to provide appropriate and quality education not only for our most able youth but for all youth who can profit from a high school education.

The school has the responsibility for guaranteeing to each American youth the opportunity for achieving self-realization and social effectiveness. What is the school's rôle in the achievement of these goals? Chapter II states the task—"meeting the needs of all"—in terms of a humane philosophy of education. Chapter III sets forth the task in terms of the range of functions through which the secondary school advances in a variety of curriculum designs and programs to achieve its goals. Subsequent chapters deal with facets of the changing school in operation. (Cont. on p. 74)



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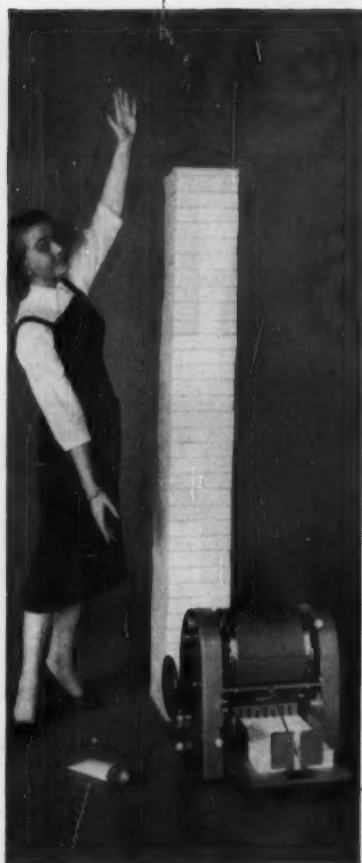
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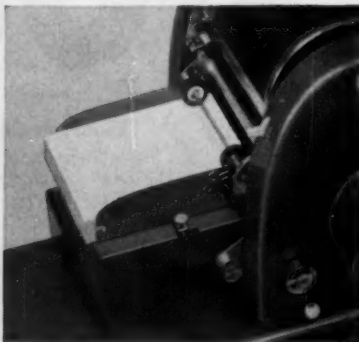
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Particular attention is placed upon administrative problems, including planning, organization, management and community relations. The upward extension of the secondary school and relations between school and college are also discussed in view of the high expectancy of higher education by an increasing youth population and other factors present in the current scene.

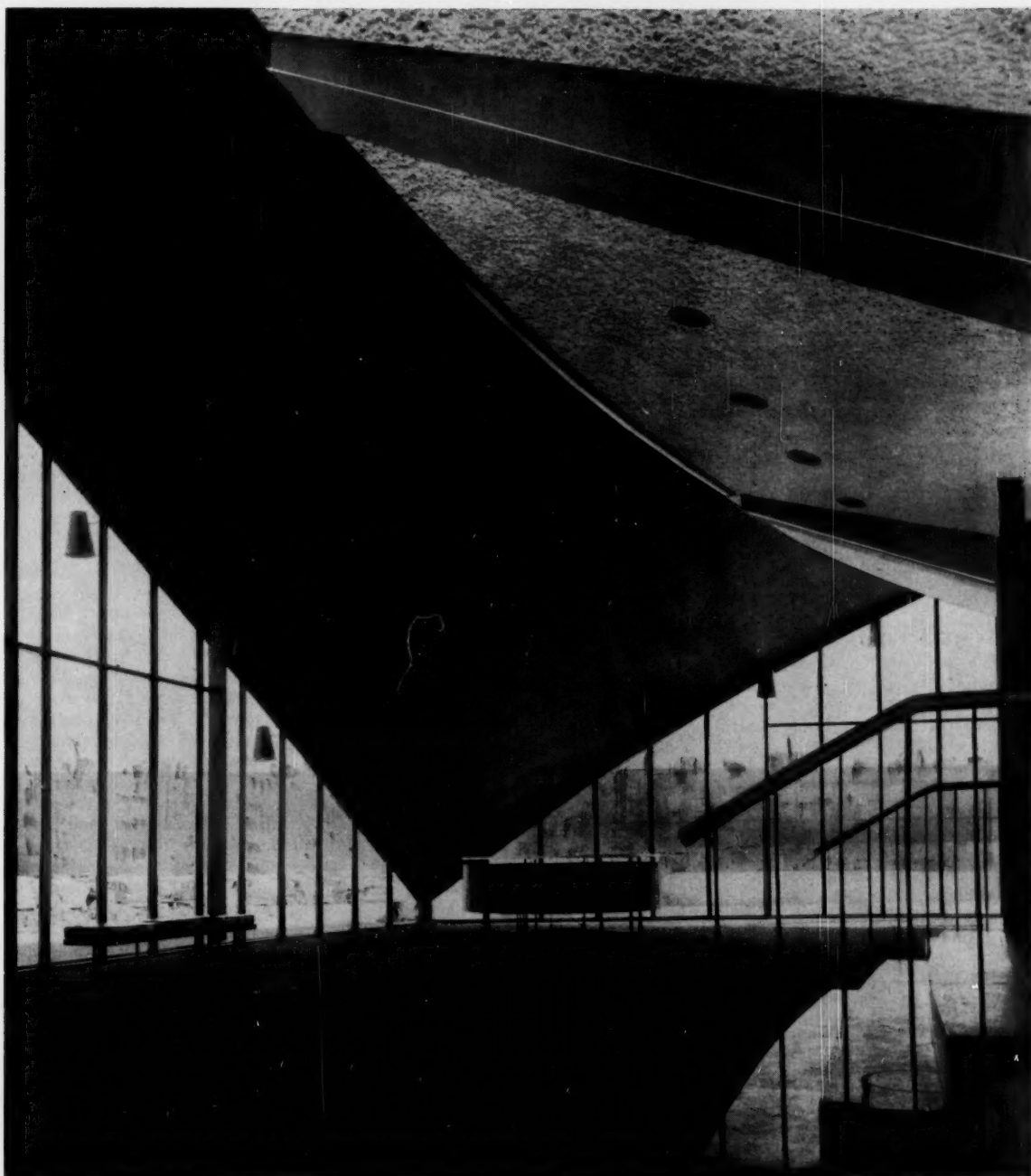
The final chapter attempts an appraisal of the modern secondary school by describing its significant accomplishments and its unrealized goals. The book does not give the dimensions of an Utopian school but does suggest references about novel and dynamic schools. It also discusses in some detail eight essential characteristics of the secondary school of the future.

These eight benchmarks of a high school that does meet the demands of a changing world may prove of value to local schools and communities seeking a better structure and an improved program. It is a safe prediction that schools will respond to public pressure and professional zeal to reexamine their purposes and to chart anew their future course.

## CONFIDENT OF FUTURE

The commission concludes with the confident belief that the American high school will measure up to the demanding tests of a world in change and in conflict. "The achievements of the modern secondary school should be recognized as worthy of our highest praise. The untiring and fruitful efforts of the past and present have nurtured and guided the secondary school through a period of growth and maturation. This relatively young institution has now come of age and is ready to assume the grave responsibilities and obligations of maturity. This new and demanding rôle of universal secondary education is intertwined with America's future. As the early school contributed to the development of democracy, the secondary school of tomorrow will be a dynamic force in the perpetuation and refinement of our free society. America's destiny is in the minds and hearts of its youth." #

Members of the yearbook commission are: John H. Fischer (chairman), superintendent of public instruction, Baltimore; David B. Austin, professor of education, Teachers College, Columbia University; Frank H. Bowles, president, College Entrance Examination Board, New York; Ralph Dailard, superintendent of schools, San Diego, Calif.; Joseph B. Gucky, superintendent of schools, Stephenson, Mich.; Lloyd S. Michael, superintendent, Evanston Township High School, Evanston, Ill.; Glyn Morris, director of Guidance, Board of Cooperative Educational Services, Lyons Falls, N.Y.; Mark Nichols, director of vocational education, state department of public instruction, Utah; Clarence H. Spain, principal, Binford Junior High School, Richmond, Va., and Henry L. Wright, Kistner, Wright & Wright, architects and engineers, Los Angeles.



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## The Most Neglected Hour

H. C. BLECKSCHMIDT

Assistant Superintendent in Charge of Business Affairs  
Normandy School District, St. Louis

THERE is no such thing as time out for anything in a school day. Every activity in which the child takes part is a learning experience. Every class, every sport, every contact with fellow students and faculty during the lunch hour as well as in class contributes to the learning process.

Many times we administrators neglect to take advantage of opportunities for learning, except when the child is actually in the classroom. The *most neglected* opportunity is the time the child spends at school during the lunch hour.

We say the school lunch should be an educational experience but, actually, is it? The lunch bell rings and everybody, including the faculty, makes a mad rush for the cafeteria. Everybody wants to eat as quickly as possible because he is hungry and the time is limited. Restless youngsters shuffle along the line, while teachers crowd ahead. The first group has to finish eating and be out by the time the second group comes in.

### EATING IS MAD RUSH

After the youngster goes through the line, he looks for a table. Is there a vacant space? Well, there is if he gets there first. He usually finds that his nearest neighbor is so close they could eat out of each other's plates. Often the dining room is hot, stuffy and noisy—certainly it's a place where he would rather not be. Right here we are helping to develop the eat-and-run habit so easily carried into adult life.

In the entire school operation, the cafeteria is the spot that creates the most complaints. Everyone finds it easy to criticize the food program: same old menu, food too hot, food too cold, food not tasty, portions too small, no variety, food not top quality, meat not inspected, lunch period too short, a fly in the room, and on and on. These complaints go directly to the

homes, and the parents come back with the same complaints, only now there are more flies. Parents who have never eaten in the cafeteria during the lunch hour know all of its shortcomings. Many times the teachers, too, sound off. Some of them are counting calories and think the menus should be planned especially for dieters.

If the day's activities are getting more crowded in your schools, as they are in ours, it is easy to try to make the lunch periods shorter and shorter. Is it impossible to arrange class schedules so that the youngsters can eat lunch properly and enjoy it?

However crowded the day is with classwork and other activities, it seems to me that we are treading on dangerous territory if we don't allow adequate time and provide adequate facilities for a restful and enjoyable lunch. Administrators must not encroach on the length of the lunch period beyond a reasonable, practical and healthful number of minutes.

Maybe the complaints we get are justified. We have created in our cafeterias a situation so far from a satisfactory learning experience that we often give up and say: "Let us just feed them and get it over with as quickly as possible." It is not necessary for these adverse conditions to remain, and I should like to suggest three ways of creating an atmosphere for "better time in for education."

1. The physical plant must lend itself for a proper learning experience.
2. There must be a cooperative spirit among the personnel.

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*Herman C. Bleckschmidt is an ideal sort of business and finance officer. He is interested in learning experiences for children throughout the school day, including the lunch hour. Perhaps it is because he started his career as a classroom teacher in the school system where he is now assistant superintendent. He is chairman of the village board and sits on the Y.M.C.A. board.*

---

3. There must be good school and community relations.

The primary aim of all education is to develop good citizens by improving mind and body, and health education must take place in the cafeteria as well as being correlated with other subjects.

### Physical plant often poorly designed.

Most of the complaints and criticisms emanating from the cafeteria are made possible because of defects or lacks in the physical plant. Hundreds of new school buildings are being built every year with new ideas, new materials, and new methods incorporated in them. We don't build a building today like the one we built five years ago, or even three or two years ago.

But what is happening in the design of our cafeterias? It is true that there are some new ideas, some innovations in food service equipment, but by and large few substantial changes have been made in the past few years.

Are we trying to build cafeterias today that will help eliminate the youngsters' complaints? Are we trying to build into these new plants a situation that will make it possible for administrators to create a desirable learning experience during the lunch period? Why can't we plan and build a cafeteria of the right size and proportion to allow sufficient time for each lunch period? Then every student will know that when he goes through that line a comfortable and an uncrowded place will be awaiting him. Why can't the room be properly ventilated and decorated? We ventilate and decorate everything else.

**Multipurpose room is only a substitute.** We hear much today about multipurpose rooms, rooms that are used for everything including classrooms, but with one of the main purposes being that of a dining room. I know the multipurpose room has solved a financial problem in a great number of school buildings, but to me the multipurpose room is only a sub-

Adapted from an address given at the American School Food Service Association convention, St. Louis, November 1957.



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stitute. Usually everything inside the room has to be portable, and no one group can claim the room as its own or treat it as its own. Under these circumstances it is difficult to create a satisfactory teaching-learning situation during the lunch hour.

In schools in which a dining room is planned and built primarily for dining purposes, we are overlooking an excellent opportunity to tie together classwork and activities with a noon-day learning experience if we do not incorporate into the physical structure of the cafeteria facilities that will help provide a learning atmosphere.

**Ideal place for exhibits.** The cafeteria is one place in which students from all classes, all departments, and all activities come together at noon for lunch. It is a common gathering place, a sort of a community center. Why not take advantage of this fact? For one thing, why not give the children the opportunity to see at first hand, while they are standing in line, or while they are eating, or even after they have finished eating, what others are doing and what is really happening in the school. This means provision for both permanent and temporary exhibits.

These exhibit spaces should be attractive, well lighted, well placed, and sufficient in number to accommodate all departments and to give the appearance of a worth-while display. They would give teachers and students an opportunity to boast a little about what they have done—in journalism, mathematics, science and home economics, and all departments.

A prominent exhibit space could include a clear and simple statement of the essentials of a balanced lunch with suggestions for substitutes that are available. Actual displays of good lunches would be on view before the pupil starts through the line. This would make the waiting time seem shorter as well as being a strong instructional feature.

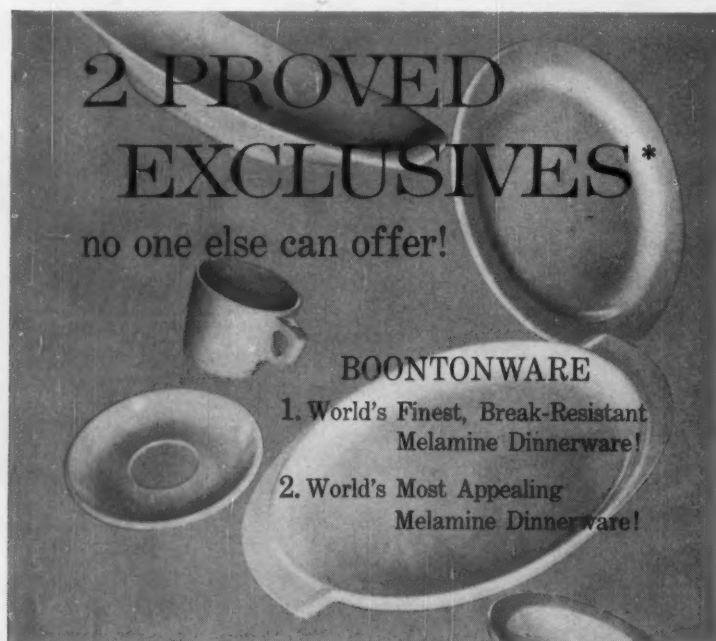
The good cafeteria manager would use display areas to recognize special days and events from a foods standpoint. Our supervisors at Normandy have appropriate decorations for holidays: pumpkins for Halloween, turkeys for Thanksgiving, and a Christmas tree for Christmas. And there are special dishes for these occasions.

Special school events, too, could be recognized, such as school election day or special sports events. What is wrong with a fashion show of apparel the girls have made? These ideas will stimulate more interest in the luncheon and will help to develop the students' pride.

A little extra time given the cafeteria in the planning stage will mean adequate space, proper ventilation, adequate lighting, acoustical treatment, and good decoration. Our dining rooms could be planned to resemble gay and interesting restaurants. No satisfactory learning experience will result until the physical facilities are adequate.

**Second requirement is cooperative personnel.** A second requirement for a good learning situation in the cafeteria is the proper attitude of the personnel. I include in this category every employe in the school system—not only cafeteria workers, but custodians, bus drivers, nurses and supervisors, as well as teachers and administrators. All of these persons should eat in the cafeteria, remembering that their attitude toward the lunch program is reflected in their actions.

Every employe in the school, whatever his capacity may be, is a teacher when his job deals with the student. If the person behind the serving counter is conscious of the fact that whatever she says and the way she says it and whatever she does and the way she does it are making an impression on the students in the line, she is taking advantage of a natural learning



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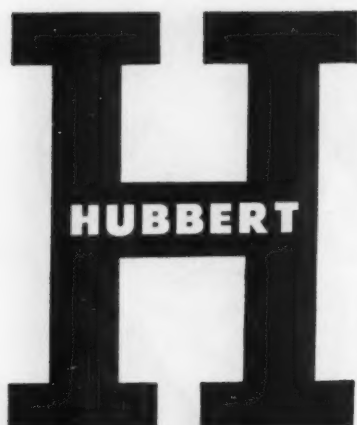
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situation. If she is properly trained, she can do a valuable bit of service in suggesting the contents of a satisfactory lunch. She can call attention to displays and posters, and she can help youngsters complete their tray with what is still needed for a balanced lunch. It is important that children be given a definite pattern for a satisfactory lunch, and she is the one who can do it.

The cafeteria manager is the key person in establishing and maintaining the proper cooperative spirit in her own group and in all school personnel. She should be a salesman and know how to get unfamiliar foods and new dishes on the child's tray. Knowing that the average child "eats with his eyes," a good supervisor will constantly strive for attractive, appetizing dishes.

**An opportunity to work with parents.** A third requirement for a good learning situation in the cafeteria is good public or parent relations. A lunch program cannot be considered successful until it is, first of all, an educational program. This success will be determined in the final analysis by the ability and willingness of the parents to support such a program. Yet only a small percentage of our parent population ever gets into the school cafeteria during the lunch hour.

In spite of this fact, the cafeteria is an ideal medium by which the parents can be brought into the school picture. It is one of our administrative responsibilities to interest the parents and to get their cooperation, for the cafeteria can be our most important contact between school and community. Let us see how this works.

The schools feed the youngsters only one meal each day, about one-third of his daily requirements. Therefore, the parents carry the primary responsibility for the feeding of their children. The school lunch program being only a fraction of the day's food requirements, the parent is usually eager or willing to cooperate in any phase of it. This opens the door for community participation through conferences, home visits, and pupil progress reports, and none of these should ever end without some discussion of health and dietary problems.

**Opportunities must be created.** Many ways of obtaining community participation are peculiar to a particular situation; therefore, every administrator must be on the alert for ways that will fit in best in his school. The time is not long distant when the school cafeteria will be more widely used as a community and educational center, and the noon-day lunch program will be only one of many activities involving use of the cafeteria.

**Use cafeteria for school and community affairs.** We must never overlook the fact that all school affairs should be held in school or on school property, if possible, and that most of these affairs call for food. Class parties, junior proms, school dances, sports banquets, and other gatherings are often held off the school premises, and each time the school itself does not assume responsibility for these activities an excellent opportunity is lost for better community relations.

The cafeteria cannot be put to better use after or before the lunch hour than in accommodating the demands of school related organizations and character building activities. If these affairs are under the supervision of school personnel and the responsibility is assumed by the administrators, more educational advantages and learning experiences can be made available to the students. Having these affairs on the premises also creates in the minds of the students a better attitude toward their school.

Administrators are constantly looking for ways of utilizing the school facilities for a maximum amount of time. Cafeterias take a large share of the building dollar; therefore, the administrator must see that the cafeteria returns a maximum in educational value for the investment.

In the Normandy School District, of which we are a part, one of the policies of our board is to make available cafeteria facilities to all school related organizations and civic organizations, so that now all of our P.T.A.'s, mothers clubs, fathers clubs, school councils, and faculty organizations use our cafeterias. More and more of these meetings are held during the day. Parents and teachers both appreciate this privilege.

**Remember these three ideas.** The three ideas I have mentioned are important in the creation of desirable learning experiences during the lunch program. They are:

1. **Proper and adequate physical facilities.** Without them no other program is possible.
2. **Cooperative attitude of all school personnel.** Employees are experts in their own fields and must be made to feel that they constitute an important cog in the whole program. The quality of the personnel probably influences the quality of the program more than any other factor. Well qualified personnel can do much with a limited budget and limited equipment.
3. **Desirable public relations.** The cafeterias belong to the community, and good community relations are most important in this phase of the over-all school program. #



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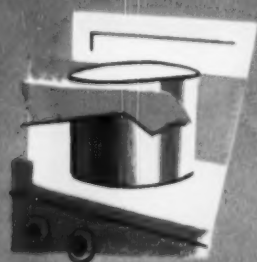
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# Why squander man-

IS IT WORTH IT? COMPARE HEINZ

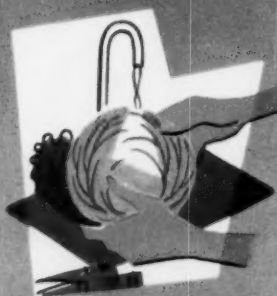
## OLD-FASHIONED



MAKE THE STOCK



SELECT THE VEGETABLES



WASH



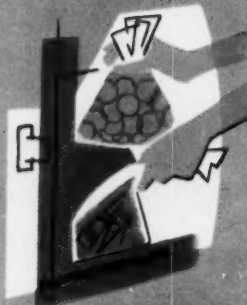
CHOP



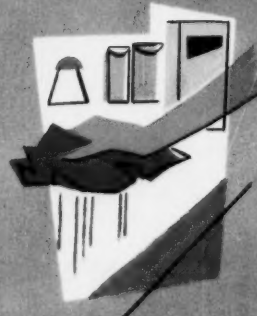
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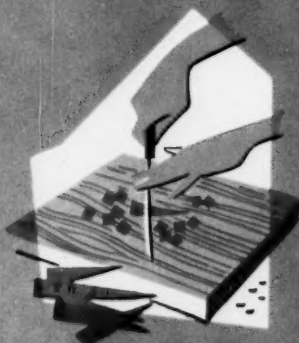
# hours making soup?

SOUP AT OUR EXPENSE AND SEE!

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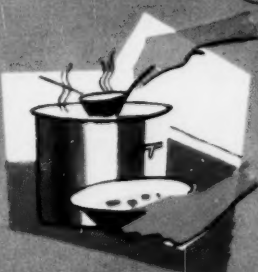
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## wire from Washington . . . . . By EDGAR FULLER

### Education and security

► The Sputniks have shaken our national complacency so thoroughly that education has become serious news. There is increased understanding that our way of life in the future depends largely upon the quality of our system of education. World leadership and national security demand that we make better use of our human resources.

Let us remember that in 1957 there were 4,318,000 persons born in the United States, many more than in any previous year. The Census Bureau estimates that more than 4,100,000 of these will be living in 1980, when they will be 23 years old. Education is challenged to prepare them for 1980 and beyond. Each crop of preschool children born since 1952 poses the same challenge, and it is not too late to improve schools and colleges for students already enrolled.

We believe Walter Lippmann has pin-pointed our national deficiency as follows:

"Our people have been lead to believe in the enormous fallacy that the highest purpose of the American social order is to multiply the enjoyment of consumers goods. As a result, our public institutions, particularly those having to do with education and research, have been, as compared with the growth of our population, scandalously starved."

The situation is a challenge to every individual and to every public and private organization whether local, state or national. We shall deal this month with proposals for national action by the national government, which has constitutional responsibility for national security.

### Administration's program

► The Administration recommends additional funds of about \$209,359,000 for education: with \$64,500,000 to the National Science Foundation and the rest to the U.S. Office of Education. This year the Foundation has \$14,500,000 for institutes for high school and college teachers, programs to attract students to science careers, to improve science teaching, and for graduate study in science. The new funds would greatly expand these programs.

The National Science Foundation operates through colleges and universi-

ties on the basis of individual contracts with local institutions. The projects include many in higher education and advanced scientific research, but the tremendous expansion now recommended is directed at improvement of science and mathematics in secondary schools. *There is obviously less state and local autonomy and more federal control in this system of administration* than in most of the programs proposed for the U.S. Office of Education.

**Office of Education programs.** The Administration proposes federal appropriations of \$144,859,000 for the fiscal year beginning July 1, 1958, to be administered by the U.S. Office of Education for the promotion of science and general education. The objectives are to strengthen our educational system in its capacity to meet national needs by: (1) earlier discovery of student aptitudes, improved counseling and guidance services in high schools, and undergraduate scholarships; (2) strengthening science and mathematics teaching in public elementary and secondary schools; (3) expanding and improving teaching of modern foreign languages; (4) increasing the output of qualified college teachers through expansion of training in graduate schools; (5) enabling the Office of Education to perform more effectively its existing responsibilities for educational fact-gathering and national leadership in educational affairs.

All the states, the District of Columbia, Alaska, Hawaii, Puerto Rico, the Virgin Islands, and Guam would participate in the Administration's program. Following is a review of the principal titles of the Administration's education bill.

**Title I—Encouragement of able high school students.** For this purpose the Administration recommends \$15,775,000 as grants to states for testing, counseling and guidance, \$500,000 for institutes to upgrade counseling and guidance personnel, and \$8,500,000 for undergraduate scholarships for students.

Federal grants to states for testing, counseling and guidance would be allocated to each state in an amount equal to \$1.25 for each student enrolled in public and private schools in Grades 9 to 12, with any additional appropriations distributed to states on the basis of their relative public

school enrollments. These funds would be matched 50-50 by the states and by the private schools concerned.

The funds would be used for early and continuous testing of high school and pre-high school students in public and private schools, and for maintenance of personnel records. They would also be used for strengthening counseling and guidance services in public secondary schools including employment of additional guidance personnel, training for counseling and guidance personnel, and perhaps salary supplements. The states would determine in their state plans the purposes for which the funds are to be used in each state, with freedom to emphasize some and de-emphasize or even omit others of the programs listed.

**State administration.** Administration would be by state departments of education under state plans providing minimum qualifications for counseling and guidance personnel and testing at least once before the 10th grade and once thereafter before the 12th grade. In states unwilling or unable to provide for the testing of students in private schools, the U.S. Commissioner of Education would administer the tests for those students.

**Federal administration.** The U.S. Commissioner of Education would be authorized to contract with institutions of higher education for regional short-term and regular session institutes for upgrading, counseling and guidance personnel from public high schools, including stipends for the trainees.

**Scholarships.** Scholarships would be provided for 10,000 needy and able students each year for four years. After four years no new scholarships would be granted, but those in effect would be continued until the courses already begun had been completed. Scholarships would be distributed among states on the basis of relative population 18 years of age. Selection of scholars would be made by state scholarship commissions according to criteria providing reasonable assurance of selection on basis of need and ability to do well in any college field of study, but with reasonable preference for those students with good preparation in mathematics and in science. (Cont. on p. 82)





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Federal scholarship funds would not require matching, but administrative expenses of state scholarship commissions would be on a 50-50 matching basis.

**Title II—Strengthening science and mathematics teaching in public schools.** The Administration asks \$10 million for the first year to assist the states in strengthening state department of education leadership in science and mathematics instruction.

Allotment would be made according to relative public school enrollments in Grades 1 to 12, matching would be 50-50, and the funds would be used

for (a) supervision of instruction, with particular emphasis on science and mathematics; (b) modernization of science and mathematics curriculum, instructional materials, and classroom and laboratory equipment, and (c) improvement of teacher education in mathematics and science.

The major part of the Administration's program calls for \$100 million next year to assist the states in strengthening public secondary school instruction in science and mathematics. Administration would be by state departments of education under state plans; funds would be allocated to the states according to rela-

tive public school enrollments in Grades 9 to 12, and matching would be 50-50.

The states could use the funds to encourage local schools (a) to expand or improve science and mathematics teaching in public secondary schools, (b) to employ additional qualified science and mathematics teachers and supervisors, (c) to provide extra pay so as to make mathematics and science teaching more competitive with other employments requiring comparable training, or (d) to provide laboratory equipment and minor remodeling of laboratories.

States would not be eligible for grants for science and mathematics teaching unless they also participated in the smaller program for strengthening state departments of education.

**Title III—Foreign language development.** The U.S. Commissioner of Education would be authorized to establish institutes for college, secondary and elementary modern language teachers through contracts for payment of up to 100 per cent of the cost of their establishment and operation in public and private colleges and universities, including stipends to trainees.

The commissioner could contract with institutions of higher education for them to provide foreign language training centers for teaching of rare languages on a 50-50 matching basis, and to pay stipends for the study of rare languages either at home or abroad.

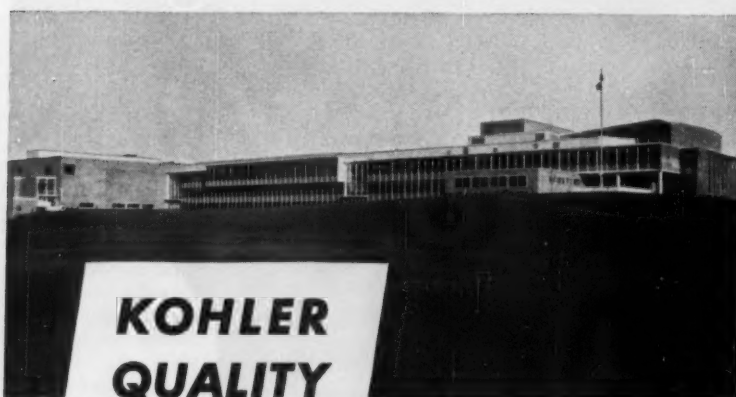
Administration would be by the U.S. Commissioner of Education, directly to the institutions concerned, with the advice and assistance of a national advisory committee on languages, and would include authority to conduct or contract for research, surveys or demonstrations in teaching of foreign languages. The recommended appropriation for next year for foreign language development is \$1,284,000.

**Title IV—Expansion of graduate education.** The Administration's program calls for \$7,800,000 next year for federal grants to institutions of higher education for expansion of their graduate programs.

Institutional programs could be established or expanded up to \$125,000 annually for any one public or private institution, with matching on a 50-50 basis.

Fellowships of \$2000 plus \$400 for each dependent not exceeding three would be granted, renewable for two years, to graduate students selected by the institutions.

Administration would be by the U.S. Commissioner of Education directly to the institutions, with the advice and assistance of a national advisory committee on graduate education. Grants would be made on the basis of applications submitted by eligible institutions, with priority given to new or expanded pro-



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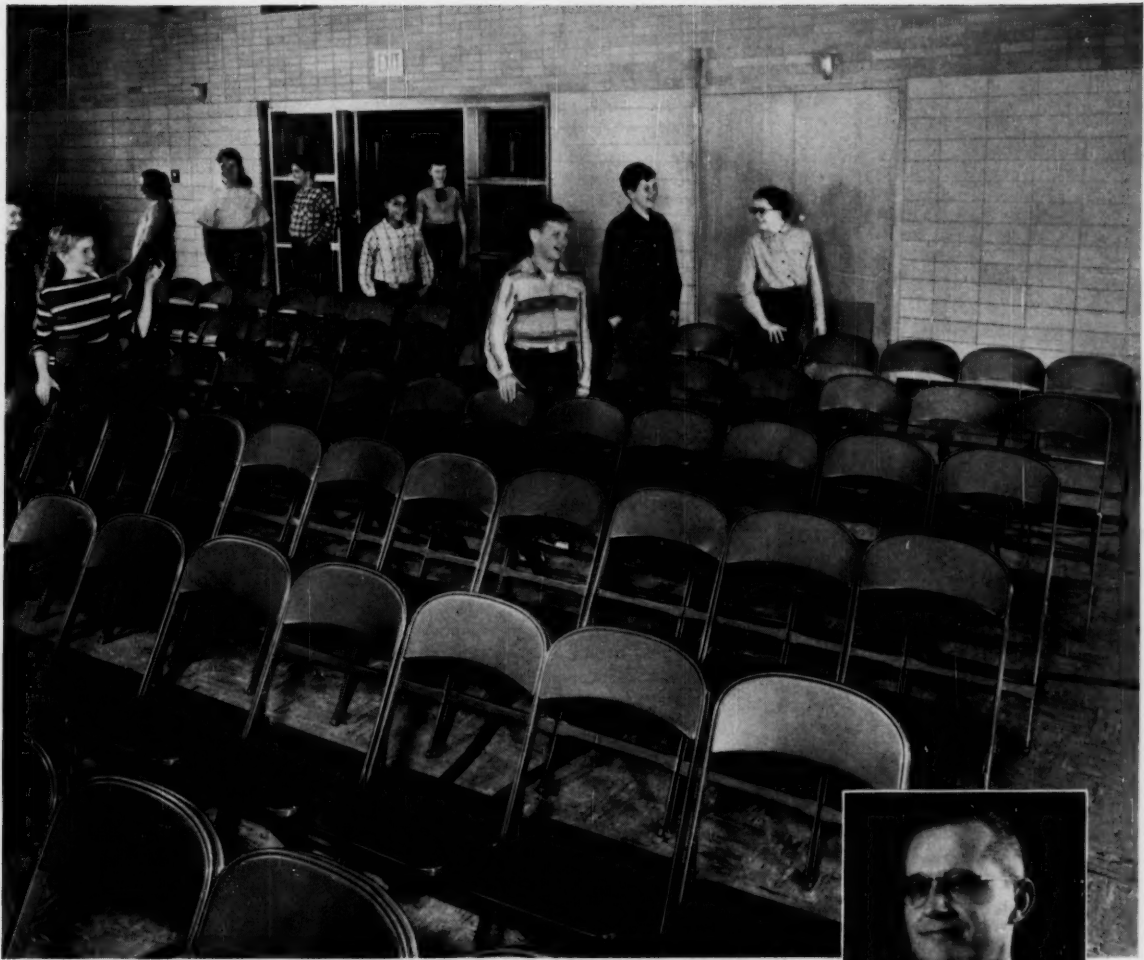
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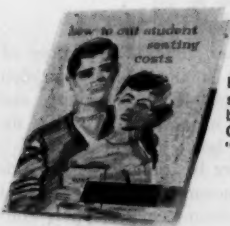
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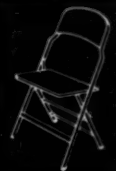


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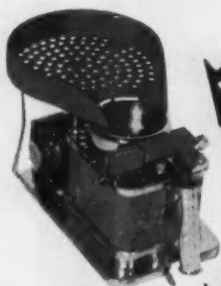
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grams designed to prepare for college or university teaching.

### The N.E.A. program

► The Legislative Commission of the N.E.A. has announced a massive program of federal financial support for education at all levels as a national necessity. Such a program "represents over-all N.E.A. policy," according to the executive secretary, William G. Carr.

As in the case of the Administration's program, the N.E.A. policy is that state education agencies and local boards of education must maintain their current financial efforts and must continue to make decisions as to what shall be taught and by whom. Assuming that they will continue their best efforts, however, the N.E.A. believes that the major deterrent to quality education is its cost and that this can be solved only by large federal assistance.

**Extent of program.** The N.E.A. proposes a federal appropriation of approximately \$1.1 billion the first year, rising to an annual federal appropriation of more than \$4.6 billion within five years and continuing indefinitely.

This program would include 20,000 scholarships in the first year, increasing to 80,000 for the fourth year and for each year thereafter. These scholarships are estimated at \$1200 each, and would cost about \$96 million annually after three years. The N.E.A. also proposes 5000 fellowships for the first year, 10,000 for the second, and 15,000 for the third and succeeding years, averaging \$3000 a year each. There would be no matching by the states for the scholarships or fellowships.

**Strengthening state agencies.** The N.E.A. proposes at least \$25 million annually for the development of special services in state departments of education. As in the case of the Administration's proposal, much would be left to the judgment of the states concerning how these funds would be used. They would include testing, counseling and guidance services similar to those in the Administration's program.

**Salaries and construction.** Most of the funds in the N.E.A. program would be allocated to states on the basis of \$25 per school age child in the first year, increasing to \$100 per school age child in the fourth year and for each year thereafter, these funds to be used for salaries of public elementary and secondary teachers or for construction of public school building facilities. The exact proportions to be applied to teachers' salaries or to construction of school facilities would be left to each state. Matching for this program would be delayed until it was well established.

**Tax deductions for teachers.** The N.E.A. will seek to provide a federal

income tax deduction up to \$600 annually for professional expenses of teachers such as attendance at summer school. Passage of H.R. 4662, pending in Congress, would accomplish this purpose.

**Other legislation.** The N.E.A. will support continuation of present federal programs in vocational education, school lunch and school milk, library services, and federal assistance for the construction and maintenance of schools in defense areas.

### Hill-Elliott program

► Sen. Lister Hill and Rep. Carl Elliott (D.-Ala.) have proposed a more generous program than that of the Administration, but smaller than that of the N.E.A. It would provide for 40,000 scholarships annually for six years, a large number of fellowships, \$70 million each year for the construction of science facilities for high schools and colleges, summer institutes for 50,000 teachers of science, mathematics and languages each year, counseling, guidance and testing programs in secondary schools, extension courses for teachers, a national library of science, and presidential awards for accomplishment in science. Division of the federal administrative responsibility is about the same as in the Administration's proposal, with both the U.S. Office of Education and the National Science Foundation participating.

The authors of this program are being assisted by the staff of the Senate committee on labor and public welfare, of which Senator Hill is chairman. This committee would have jurisdiction over hearings on the program in the Senate.

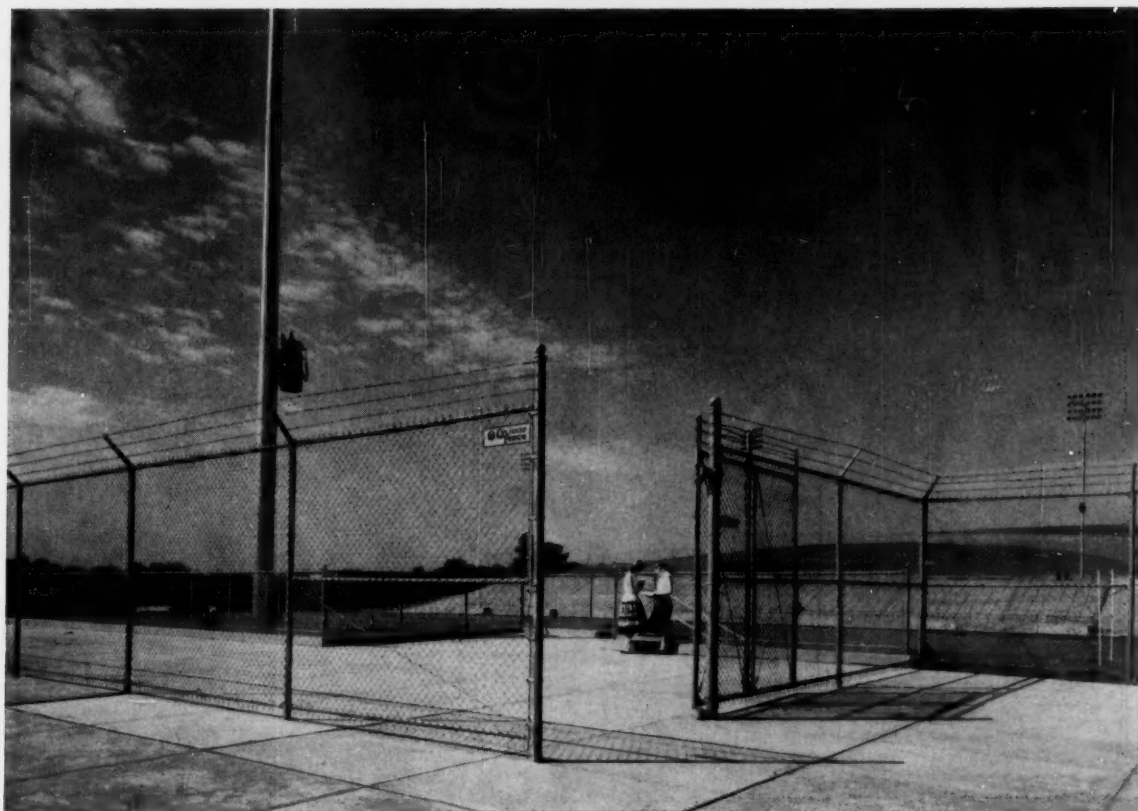
Representative Elliott is chairman of the House subcommittee having general jurisdiction over education. It was set up during the last session of Congress and is now merely in recess. This subcommittee will probably have jurisdiction over hearings on the part of the Hill-Elliott program to be administered through the U.S. Office of Education, and the National Science Foundation's portion will probably not require new enabling legislation.

Senator Hill and Representative Elliott plan to begin hearings in January, at which time their bill will be considered along with those of the Administration, the N.E.A. and others. These are the congressional committees that will probably write the principal legislation to be considered by the Congress.

### Opposed by C. of C.

► As expected, the U.S. Chamber of Commerce has announced its opposition to the Administration's program, and presumably to all others that would increase federal funds for education.

The Chamber has sought to offset this position by encouraging state and local chambers of commerce to support edu-



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cation better in the states and in local school districts, but whether this is more than a façade for its national negativism is increasingly open to question.

Wondering just how often state and local chambers of commerce support education, the N.E.A. Defense Commission recently asked for answers to the question from state and local officers of educational associations in all states and territories except Hawaii. Among the responses, 217 said their state chambers of commerce opposed educational measures, while 125 said their state chambers supported them; 757 did not know, and 42 reported no such organization existed.

Concerning the local chambers of commerce, 366 said their local chambers supported educational measures, while 118 said their local chambers opposed them; 565 did not know the positions of their local chambers of commerce on the issue, and 185 said no such organization existed in their communities.

### **Extend P.L. 874 and 875**

► The present plan of the Administration is to propose that Congress extend Public Laws 874 and 815 to 1963. There will probably be an effort to change the formulas so that payments in future years will be lower.

During the current fiscal year appropriations under P.L. 874, for the maintenance and operation of schools in defense areas, have been \$127 million, with \$41.7 million appropriated for the construction of schools in these districts under P.L. 815. Appropriations under P.L. 874 for next year will require \$149 million if the present formula is observed, with perhaps \$60 million for school construction under P.L. 815, but it is expected that the Bureau of the Budget and the President will ask the Congress to begin the reductions next year.

### **School construction**

► A large number of people are still convinced, whatever the political impediments may be, that a federal school construction bill such as H.R. 1 of 1957 would be of greatest long-range assistance to education. Secretary Marion B. Folsom specifically refused to rule out school construction as a bill the Administration might support, although it is not included as part of the program which the President will recommend to the Congress.

Science, mathematics and language instruction suffers greatly from the prevalence of very small high schools. With 50 per cent of all high schools enrolling fewer than 200 students, long-range programs for the improvement of instruction in these fields requires establishment of schools capable of offering more and better courses in them.

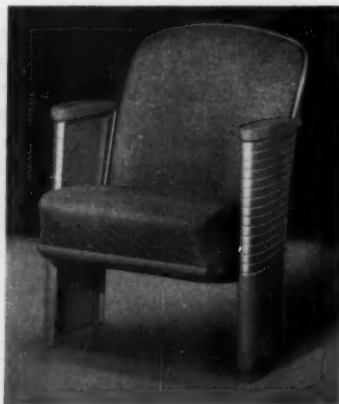
Federal funds for school construction matched by state funds would bring the states into support of school construction. Their state plans could then provide for the construction of high schools large enough and equipped to offer the needed instruction, using combined local, state and federal funds.

Without such financial assistance, it is unreasonable to expect thousands of small high schools to be consolidated. Local taxpayers often cannot abandon these small school plants and construct large new ones without financial assistance. State legislatures are pressed to supply funds for teachers' salaries before they supply funds for buildings, and without the stimulation of matching funds they are unlikely to supply substantial state funds for school construction in most states. These legislatures can get from one to nine federal dollars for each dollar of their own if they choose to build hospitals or roads instead of schools, and most of them are looking for bargains. #

**N.Y. Science for Elementary Grades.** A new curriculum stressing everyday science for Grades 1 through 6 is being prepared for New York City's public schools by the recently formed Bureau of Science and Mathematics Instruction.

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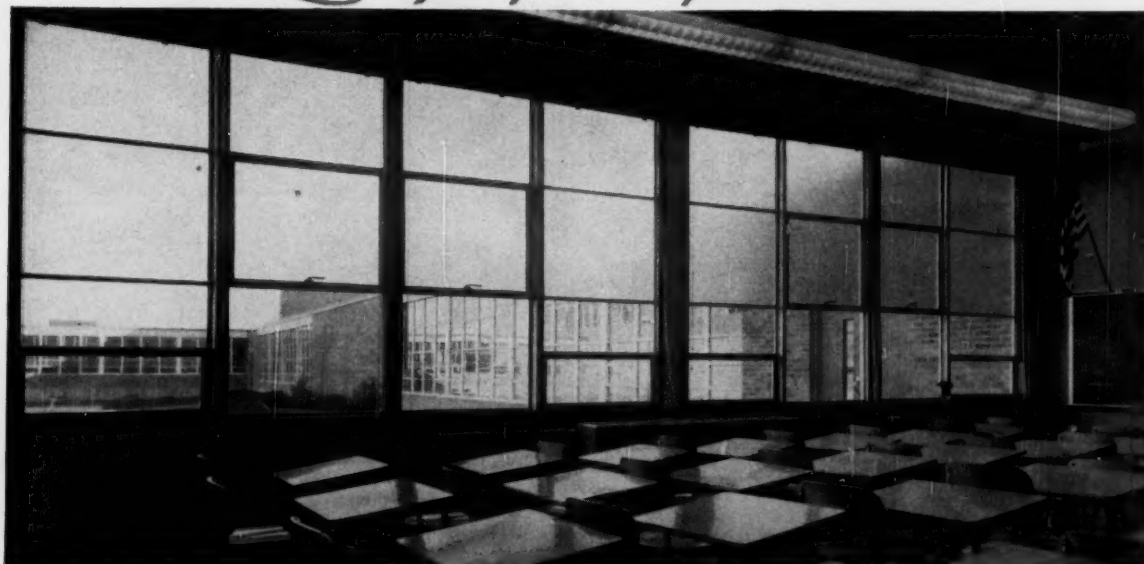
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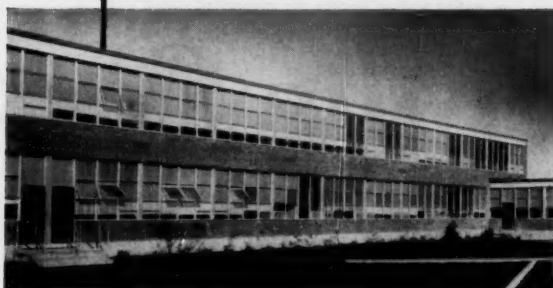


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Students see better, feel better, work better under Coolite, the Heat Absorbing, Glare Reducing Glass by Mississippi. Coolite helps keep interiors more comfortable, absorbs up to 50% of unwanted solar heat . . . cuts harsh glare that causes dangerous eye-fatigue. Classrooms appear larger, friendlier, more pleasant.

This outstanding new school makes extensive use of Mississippi Glass, including protective Polished Misco, with its unique diamond-shaped, welded wire netting—and Factrolite, another distinguished Mississippi pattern noted for high levels of light transmission.

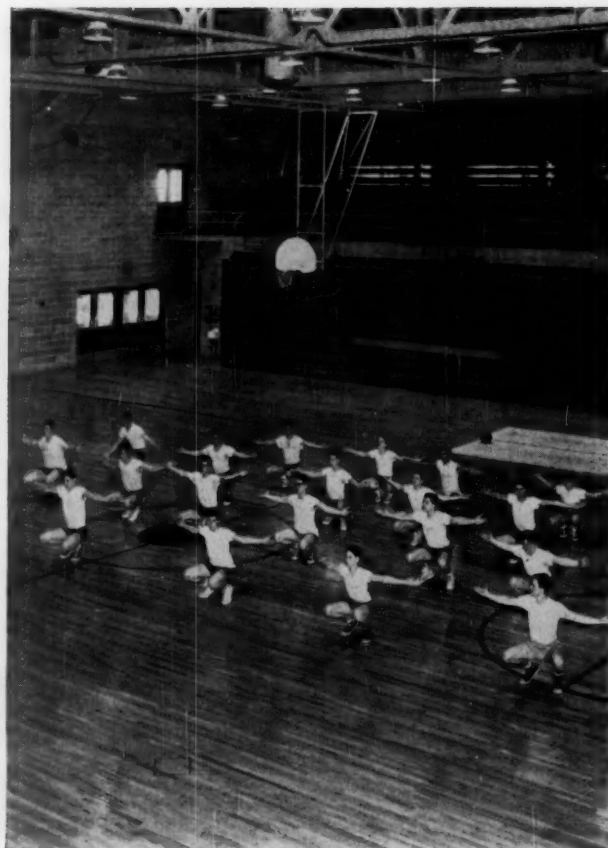
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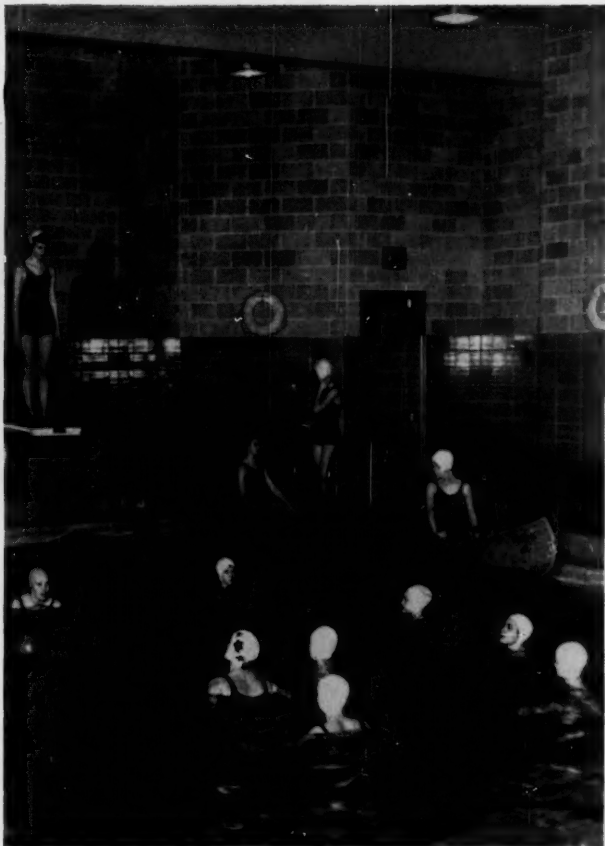
and eliminates wasteful overheating. Even more important are the savings in "after hours" heating costs. When classes are over, only the rooms *in use* are heated to normal comfort levels, while low, economy temperatures are maintained in the unoccupied rooms.

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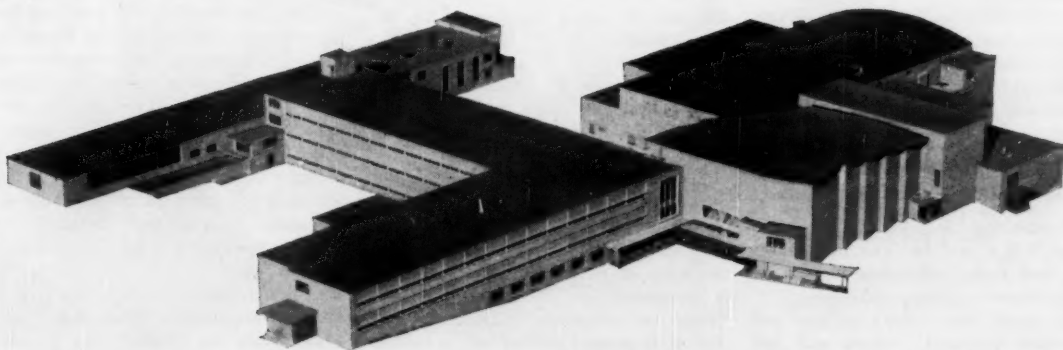


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Vol. 61, No. 2, February 1958



## NEWS IN REVIEW

### Martin Essex Chosen A.A.S.A. President-Elect

WASHINGTON, D.C.—Martin W. Essex is the new president-elect of the American Association of School Administrators, elected in a nationwide ballot.

Dr. Essex, who is superintendent at Akron, Ohio, will serve as president-elect for the year beginning March 15 and will begin a one-year term as president on March 15, 1959.

Forrest E. Conner, superintendent at St. Paul, Minn., was elected vice president, and J. Win Payne, superintendent at Ponca City, Okla., was elected to the executive committee. Dr. Conner will serve a one-year term and Mr. Payne a four-year term.

Dr. Essex, who has served in his present position since 1955, was superintendent at Middleton, Ohio, from 1935-41; East Liverpool, Ohio, 1943-45; Ferndale, Mich., 1946-47, and Lakewood, Ohio, 1947-55. He also has been a high school teacher and principal in Ohio.

Since 1955, Dr. Essex has been an A.A.S.A. executive committee member. He has served for six years as chairman of the N.E.A. committee on tenure and academic freedom, and has been an adviser to the N.E.A. Educational Policies Commission. He has been a member of The NATION'S SCHOOLS Editorial Advisory Board since 1952.

A native of Ray, Ohio, he attended elementary schools there. He received his secondary education in Coalton, Ohio. His B.S. and M.A. degrees are from Ohio State University. Baldwin-Wallace College, Berea, Ohio, conferred upon him the honorary degree of Doctor of Pedagogy in 1950.

C. C. Trillingham, Los Angeles County superintendent, will assume the presidency of the A.A.S.A. on March 15, succeeding Philip J. Hickey, superintendent of instruction at St. Louis.

### Future Influenced by School Policies—N.E.A. Theme

WASHINGTON, D.C.—The 1958 theme of the N.E.A. will be "Our future goes to school today," President Lyman V. Ginger announced recently.

He stated that today's policies will determine tomorrow's results and that now is the time for educators to coordinate their thinking and improve policies for instructional improvement.

Dr. Ginger cited Russia's present science program as the result of policies put into effect 15 years ago: small classes, well prepared teachers, prestige and adequate salaries for teachers.



Martin W. Essex

### N.E.A. Head Scores AFL-CIO Resolution

WASHINGTON, D.C.—William G. Carr, executive secretary of the N.E.A., has replied to the AFL-CIO charge that the N.E.A. is a "company union."

"It is misleading," he said, "to apply the term 'company union' to the National Education Association. Our public schools are not a company; they are government services; they are not operated for profit. Those powerful organizations in American life which oppose both the N.E.A. and organized labor on such vital questions as federal and state financial support of education will be pleased by these efforts to divide our educational forces."

### St. Louis A.A.S.A. Meeting, February 22 to 25, First of Three Regional Conventions

WASHINGTON, D.C.—February 22 will usher in at St. Louis the first of the three regional conventions of the American Association of School Administrators, which this year are taking the place of the national conclave usually held at Atlantic City. Meetings at St. Louis will extend through February 25. Dates for the other two conventions are: San Francisco, March 8 to 11, and Cleveland, March 29 to April 1.

The program at all three meetings will have a common pattern, beginning with registration at 10 a.m. on Saturday and continuing through late Tuesday evening. Saturday afternoon will be set aside for a symposium on "The New in Exhibit News" and continuous film showings. The first of six general sessions will be held in each convention city at 8:30 on the first evening.

Instead of the vesper service on Sunday, a general session will be held on Sunday morning at which clergymen will speak. Sunday afternoon will offer registrants a choice of five indoctrination programs on some of the major activities in

The AFL-CIO's charge was drawn up in the following resolution at the union's convention at Atlantic City, December 11:

"In most American communities, classroom teachers are still without an organization of their own where they can seek redress from exploitation. The National Education Association, N.E.A., dominated as it is by school administrators, does not and cannot fulfill that need because it is, in effect, a company union. In fact, in many instances, membership in the American Federation of Teachers—the only bona fide trade organization of classroom teachers in the United States—is subtly and even openly discouraged by school administrators and school boards."

Dr. Carr contrasted the N.E.A.'s 704,000 members with the 50,000 members in the American Federation of Teachers, AFL-CIO. He asserted that 70 per cent of the delegates at the 1957 N.E.A. Centennial Representative Assembly were classroom teachers.

"The National Education Association," he concluded, "is a professional organization which serves the public interest and the entire teaching profession. It has worked closely with labor unions as well as with parent-teacher, business and veterans' organizations. It will continue to do so."

which the A.A.S.A. is engaged. Areas to be covered include the secondary school program, with a discussion of the A.A.S.A. 1958 yearbook, "The High School in a Changing World"; the work of the Commission on School District Reorganization; activities of the Committee for the Advancement of School Administration; the Educational Policies Commission's forthcoming report on communication, and a preview of the A.A.S.A.'s new program of services. The third general session is scheduled for Sunday evening.

Monday morning and afternoon and Tuesday forenoon will be occupied with some 60 small group sessions, including several arranged by state associations of school administrators, and field trips. Concurrently on Monday and Tuesday there will be held a series of three closed workshops dealing with the following three subjects: at St. Louis, "Certifications and Standards Essential for the Superintendent of Schools"; at San Francisco, "Taking Another Look at the A.A.S.A. Platform," and at Cleveland,

(Continued on Page 94)

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John J. Theobald

## John J. Theobald to Succeed Dr. Jansen in New York Post

NEW YORK.—The new superintendent of the world's largest public school system will be John J. Theobald, a product of New York's schools. On September 1, he will succeed William Jansen, who has reached the retirement age of 70. Dr. Jansen has been superintendent since 1947. Currently his salary is \$32,500.

Dr. Theobald, 54, is now deputy mayor of New York City while on leave from the presidency of Queens College. He served as dean of administration at City College before being appointed as president of Queens College in 1949.

The superintendent-elect is known as a three-career man, with professional qualifications and distinguished service in the fields of government, civil engineering, and education.

His father, Jacob Theobald, had served New York public schools for more than 50 years as a teacher, principal and assistant superintendent.

## UNESCO Conference Discusses Schools' Part in Asian Relations

SAN FRANCISCO.—Theme of the sixth national conference of UNESCO held here was Asian-American relations.

Work groups suggested that teacher education, a problem in many countries, could be benefitted by the establishment of associations for the dissemination of information and the establishment of summer institutes. The group suggested that placement of more Asian teachers in the U.S. might help solve the integration problem.

The conference, held during November, was attended by some 1300 delegates from 48 states and 43 foreign countries.

Work groups also discussed philosophy and religion, and suggested that a means to world understanding would be more emphasis on neglected aspects of Asian thought.

It was suggested that Americans be exposed to more examples of Asian creative art by museum exchanges, theatrical presentations, and increase of resources for the study of Asian music.

Crucial need for a better flow of information between Asia and America demands better training of correspondents and education of the American public to a greater interest in Asian affairs, it was decided.

## Half of New Teachers to Leave Profession in Five Years

WASHINGTON, D.C.—More than half the young people who started teaching last year plan to leave the profession within five years, a U.S.O.E. nationwide survey reveals.

At the same time, 30 per cent of those who graduated with teaching qualifications in 1956 never became teachers.

Only 28 per cent of the men teachers and 14 per cent of the women teachers covered in the survey said they planned to make classroom teaching their life work. Of the men, 49 per cent hoped to move on to supervisory or administrative positions; 8 per cent of the women indicated such plans.

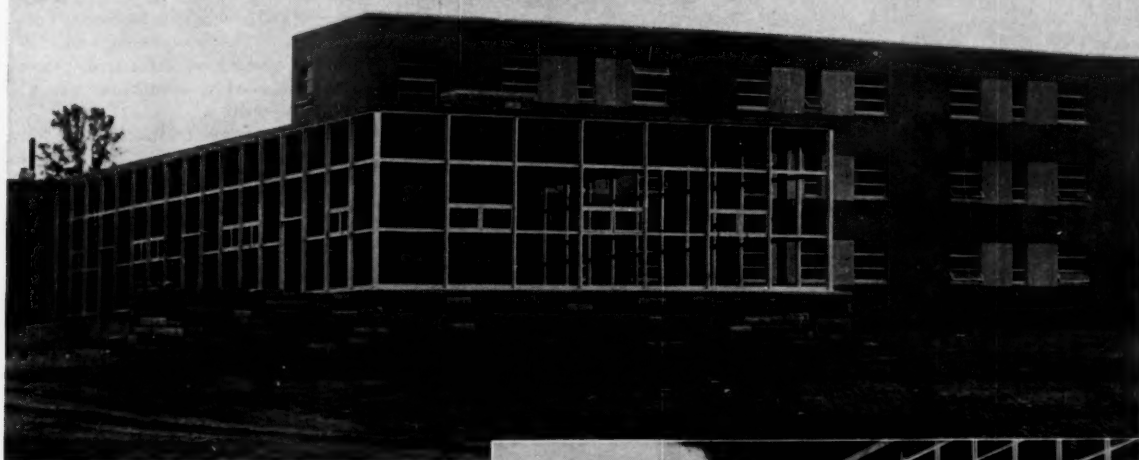
Marriage and homemaking were the plans of 55 per cent of the women, who did say they expected to return.



As the first phase of converting a hill of shifting sand to a school site, this five-tier 12 room Ladera Elementary School has been completed at Manhattan Beach, Calif. Each class level has its own terraced playground on the roofdecks. The cost was \$411,000.



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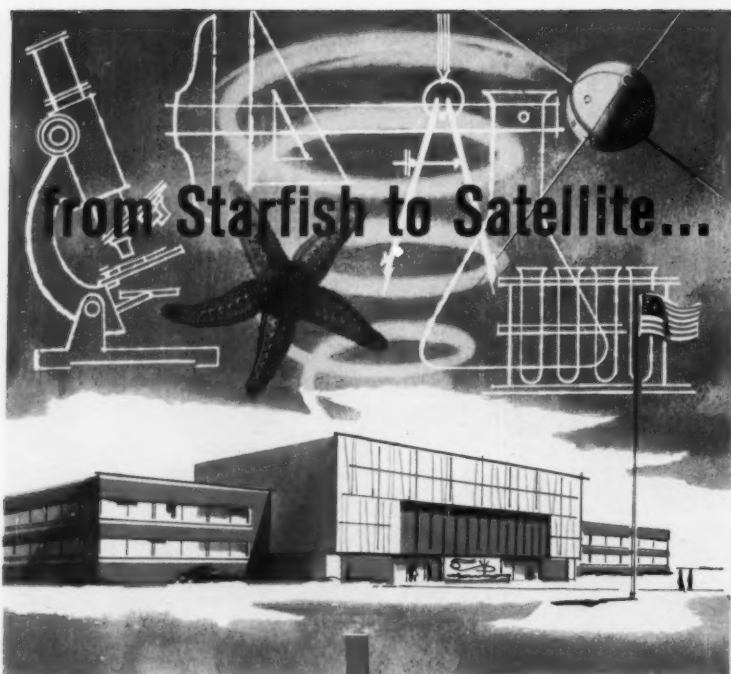
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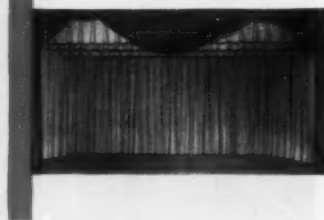
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## A.A.S.A. Meetings

(Continued From Page 90)

"Policies and Principles Involving Superintendents' Relations with Other Governmental Officials."

At St. Louis and Cleveland, the hospitality hour is being arranged for late Monday afternoon. At all three points state breakfasts will be held Tuesday morning and service club luncheons Tuesday noon. The conventions will close Tuesday evening, with the sixth general session followed by entertainment by the exhibitors group.

An architectural exhibit sponsored by the A.A.S.A. and the American Institute of Architects will be displayed at all three conventions, and commercial exhibits will be open until 6 p.m. daily at all three places.

At St. Louis only, there will be continuous showing of educational television on Monday and Tuesday during school hours. The program, which actually is being telecast to the various schools, will be shown on a large screen in the exhibit hall. On Monday there will be an opportunity, also, to visit the studios of the St. Louis ETV station KETC.

Featured speakers at the three regional conventions, announced to date, include the following: St. Louis, Lawrence G. Derthick, U.S. commissioner of education; the Very Rev. Paul C. Reinert, president, St. Louis University; Pauline Frederick, N.B.C. correspondent at the United Nations; James B. Conant, former U.S. ambassador to Germany, and John Dando, assistant professor of English, Trinity College, Hartford, Conn.

At San Francisco the speakers will include: James B. Conant, the Rev. Robert E. Richards, LaVerne, Calif., and Henry Steele Commager, professor of history, Columbia University. Among the Cleveland speakers will be James B. Conant, Rabbi Abba Hillel Silver of Cleveland, Gov. G. Mennen Williams of Michigan, and Chester Bowles, former U.S. ambassador to India.

## U.S. Must Keep Educational Balance, Says Greenewalt

INDIANAPOLIS.—U.S. efforts to restore the science balance must be made with the determination that the country shall return to scientific progress on varied frontiers, asserted Crawford H. Greenewalt, president of the Du Pont Company at the annual meeting of the American Association for the Advancement of Science here.

"I cannot agree that there is anything fundamentally wrong with our educational institutions," he declared. He pointed out that our objective is not one of filling the ranks of the professions but of creating in a large segment of the population an understanding of the foundations of our culture.



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**NATION'S LARGEST MANUFACTURER OF COMMERCIAL AND INDUSTRIAL LIGHTING EQUIPMENT**



## The More Able the High School Student, the More "Solid" the Subject Majors Selected, Survey Shows

CINCINNATI.—A sharp retort to the frequent contention that high I. Q. students are not challenged by the high school program and that they tend to select the less demanding subjects is found in recently published research findings. To the contrary.

This four-year study of the academic content of programs chosen by high schoolers shows that "able" students tend to concentrate on subjects considered intellectually demanding. Science is the most consistently chosen

major in terms of the proportion of those selecting this subject.

The survey was begun during the 1952-53 school year by testing eighth graders in the Cincinnati public schools. Its immediate objective was to determine to what extent certain aptitude and achievement tests reliably predicted academic success in high school. The report covers the records of the 1059 last June graduates of six comprehensive high schools for whom test data for the

entire four-year period, 1952-57, are available. Since the sampling is representative, it is believed that the results would not have varied significantly had the entire class been included.

Specifically, the Cincinnati report supplies information on the choices of subject area majors made by the 1059 graduates. Three majors are required for graduation. Each major consists of a minimum of three one-unit courses in a given subject.

The order of frequency with which the students chose their majors, stated in percentage of the number of students, was as follows: English (three years required for graduation), 100 per cent; social studies (two years required for graduation), 65.1 per cent; science, 52.1 per cent; mathematics, 43.2 per cent; business education, 26.9 per cent; foreign language, 26.3 per cent; industrial arts, 10.2 per cent, and home economics, 8.9 per cent.

Since an English major is a graduation requirement, the 100 per cent participation is not an indication of student interest. Similarly, graduation requirements are in part responsible for the fact that social studies is the major most frequently selected by individual students.

More significant is the disclosure that one-half of the students selected science as a major, the range at the six schools varying no more than from 49.1 to 53.0 per cent. Much credit for the popularity of the subject is attributed by the report to the wide range of science subjects offered by Cincinnati schools.

To determine what relation exists between the selection of subject area majors and intelligence, the 1059 students were divided into four I. Q. groupings, as follows: below 90, from 90 to 109, 110 to 124, and 125 and above. For the total group the median I. Q. was approximately 110, or slightly above the average for high school seniors in general.

Tabulations of the percentage of pupils in the four I. Q. levels who majored in each of eight subject areas reveal the complete consistency with which the percentages either increased or decreased in going from the lowest I. Q. classification to the highest. For example: Of those pupils majoring in business education, 47.4 per cent had I. Q.'s below 90, 39.6 per cent between 90 and 109, 18.3 per cent between 110 and 124, and 5 per cent 125 or above.

Another finding was this: Total grade point averages earned by students increased as the I. Q. level increased. The achievement of able pupils was relatively high, at least as compared with the achievement of less gifted peers.

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## National Property Accounting Guide Ready This Spring

WASHINGTON, D.C.—Work on the cooperative project on property accounting for local and state school systems has progressed to the point at which schoolmen soon will be given an opportunity to consider a draft of a new handbook and make recommendations for improvement.

Eight regional conferences are being scheduled for this purpose during March and April.

The property accounting manual, to be published next fall, is the third handbook in the records and reports series of the U. S. Office of Education. It is being prepared in cooperation with the following five organizations: American Association of School Administrators, the Association of School Business Officials of the U.S. and Canada, National Council of Schoolhouse Construction, Council of Chief State School Officers, and the National School Boards Association.

The actual compilation is being done by Paul L. Reason, specialist, educational records and reports, U.S. Office of Education. Fred F. Beach, chief of the school systems section of that agency, is the director.

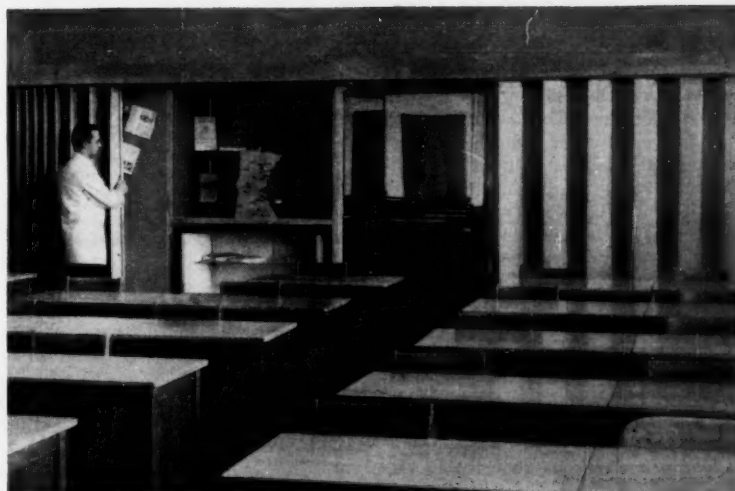
At the first meeting, in December 1956, executive secretaries of the cooperating groups and U.S.O.E. reached an agreement on an over-all project plan. Last January organization representatives developed a broad plan for the handbook's content. Representatives of the A.S.B.O. and N.C.S.C. spent a week at the U.S. Office of Education last June, considering a draft of the handbook and making suggestions for revisions. Another national conference of organization representatives took place November 4 to 7.

Four regional conferences to consider a draft of the handbook have been scheduled for March: Washington, D.C., 5 to 7; Boston, 12 to 14; Atlanta, Ga., 19 to 21; Little Rock, Ark., 24 to 26. The April schedule is as follows: Lincoln, Neb., 2 to 4; Salt Lake City, 7 to 9; Spokane, Wash., 14 to 16, and Chicago, 21 to 23.

The two earlier handbooks in the records and reports series are: "The Common Core of State Educational Information," published in 1953, and "Financial Accounting for Local and State School Systems," off the press last year.

## Finds Illinois High School Graduates Now Better Prepared

URBANA, ILL.—At a conference on school-university relations conducted at the University of Illinois, C. W. Roberts, head of the university's department of rhetoric instruction, said that Illinois high school graduates are better prepared in English than they were a decade ago. The university will discontinue its non-credit English makeup course in 1960.



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## Postwar Gotham Builds New Facilities for 245,887 Pupils

NEW YORK.—The nation's largest public school system is moving steadily toward its ultimate goal of "a seat for every child in a modern school building." During the next three years pupil enrollment capacity is to be stepped up by 51,676. This year, 19,042 "seats" will be added by the construction of nine elementary and four junior high schools, additions at seven schools with concurrent improvements, and modernization of three other buildings.

The 1958 program also incorporates preparation of plans for 23 additional projects with a pupil enrollment capacity of 20,300 with a view to construction in 1959. Then, too, 11 new sites are to be acquired for projects with a 12,334 pupil capacity to be built not later than 1960. An allocation of \$96.9 million for this three-pronged program has been approved by the board of estimates for inclusion in the 1958 capital budget.

Following several years of inactivity resulting from war imposed restrictions on new construction, New York's school building program was reactivated in 1946. Since then the annual capital budget for schools has grown from an allocation of \$9.3 million in new funds to an average of about \$100 million annually. During the 11 year period, the program has encompassed an even 300 projects provid-

ing new accommodations for 245,887 pupils at all levels of the school system.

The school building program currently is supervised by the division of housing, in charge of David H. Moskowitz, associate superintendent of schools.

## N.E.A. Conference on Education for Gifted

WASHINGTON, D.C.—A national working conference on the education of gifted students will be sponsored here by the N.E.A. February 6 to 8.

Chairman of the conference will be James B. Conant, former U.S. ambassador to West Germany. The conference will compile known facts about the academically talented student and correlate the results of experimental projects and experiences of schools in dealing with the gifted student.

## Michigan Executive Secretary Succeeded by Kennedy

LANSING, MICH.—Albert J. Phillips, executive secretary of the Michigan Education Association for the last 22 years, has resigned for reasons of health.

Appointed to succeed him, beginning February 2, is E. Dale Kennedy, associate executive secretary who had been acting executive secretary during the last several months while Dr. Phillips was on leave of absence because of illness.

Dr. Phillips had been a member of the M.E.A. executive staff since 1933, when he joined the state teachers association as director of research. He had been executive secretary since 1936.

A former superintendent at Clio, Mich., he came to Lansing from the University of Michigan's bureau of educational reference and research. He began his teaching career in 1919 at Albion, Mich., and also had taught at the University of Michigan and at Big Rapids, Mich.

Dr. Kennedy also is a former superintendent. He served the schools of Rochester, Mich., from 1941 to 1950. He was appointed to the M.E.A. staff in 1950 as assistant executive secretary.

## Council Asks Continuing Reservation of ETV Channels

WASHINGTON, D.C.—The Joint Council on Educational Television has advised the F.C.C. that an educational television service can develop only if the government continues to reserve channels for educational purposes.

Commercial enterprises had protested the reservation, asserting that the immediate future held no likelihood that these reserved channels would be used.

The council replied that, since the original reservation of specified channels in 1952, 28 communities have started educational TV stations and 11 more are under construction.

# No. 1

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only \$240\* ... saves building costs  
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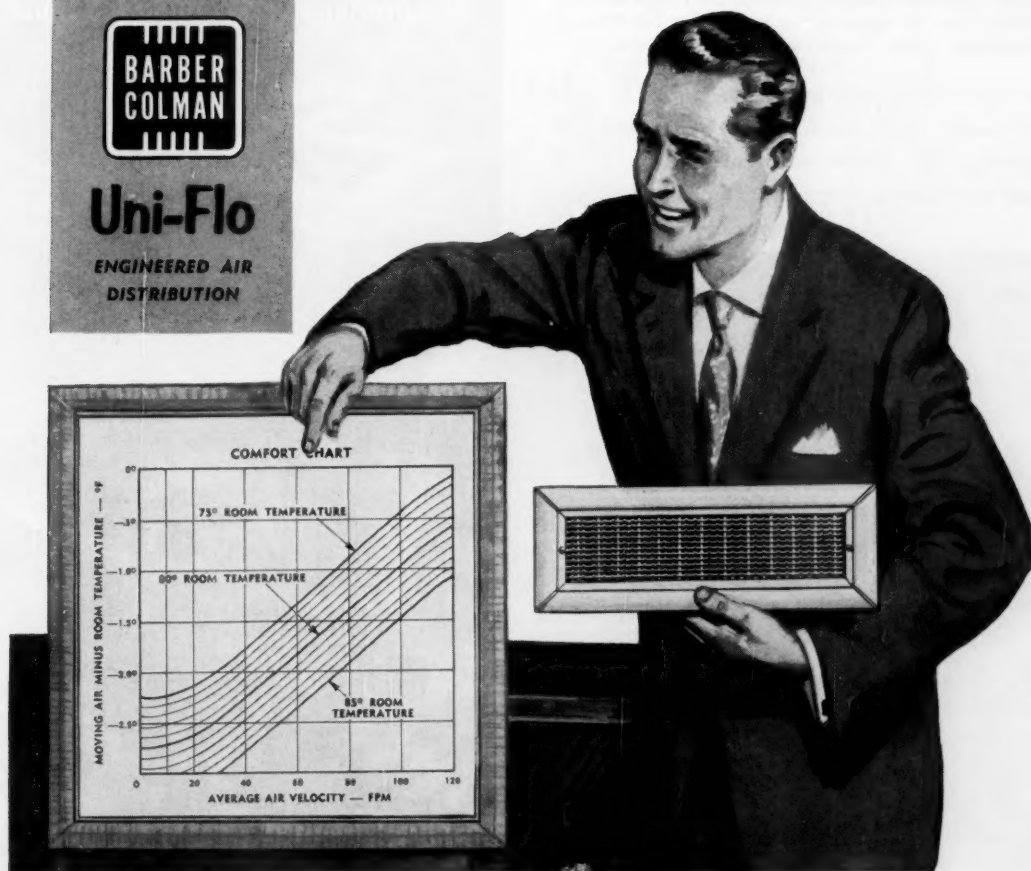




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Unoccupied rooms are held at economical lower temperatures.

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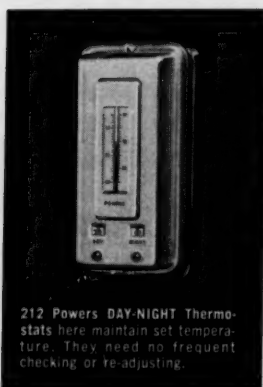
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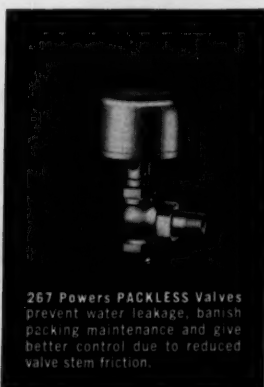


Above: one of three modern gymnasiums.



212 Powers DAY-NIGHT Thermostats here maintain set temperature. They need no frequent checking or re-adjusting.

(C24)



267 Powers PACKLESS Valves prevent water leakage, banish packing maintenance and give better control due to reduced valve stem friction.



## U.S. Office of Education Televises Annual Report

WASHINGTON, D.C.—The U.S. Office of Education has televised its first annual report to the nation, partly by a documentary film entitled "Education '57" and partly a report from Commissioner Lawrence G. Derthick. The program became available to commercial broadcasters and educational stations on December 15.

Commenting on the segregation problem, Commissioner Derthick said it is "not essentially educational in its nature but is largely a social problem which, since the Supreme Court decision, has legal implications."

The documentary film shows that about a million children are being shortchanged educationally by two and a half years, since they attend half-day school sessions.

The film predicts that out of every 10 entering high school students, only 1½ will graduate from college.

## U.S.-Russia Educator Exchange Planned, Secy. Folsom Discloses

WASHINGTON, D.C.—Marion B. Folsom, secretary of the Department of Health, Education and Welfare, has disclosed in a letter to Sen. J. William Fulbright that plans have been made with the Soviet Union for an exchange of eight educators. Object of the exchange is a continuing comparison of the Soviet system of education with the American.

Mr. Folsom's letter was in reply to Senator Fulbright's charges that facts had been suppressed in the government's recent report, "Education in the U.S.S.R." Secretary Folsom denied that the report had been slanted. He said that the first draft had been considered "below Office of Education standards for objective and scholarly publications."

## Pure Science Is Foundation of Technical Advances

INDIANAPOLIS.—Dr. Thomas H. Osgood, dean of Michigan State University's school for advanced graduate study, says the launching of Sputniks is not, in itself, a break-through of scientific research, nor does it represent a modern development of science. It is rather a superb accomplishment of technology, of applied science, of engineering. Yet it would not have been possible without the foundation of pure science created within the last 50 years upon which the principles of rocket engineering are based.

He urged a "reappraisal of values in education and a relocation of effort," making the rôle of the scientist and scholar clear to the public.

"If the U.S. is to hold her own in a competitive world," contended Dr. Osgood, "she must recognize that long enduring pre-eminence must be based on the efforts of the men behind the scenes, the scientists and scholars in all areas of learning."

## A.A.C.T.E. Plans Program for Its Tenth Anniversary

CHICAGO.—Speakers at the opening session of the 10th annual meeting of the American Association of Colleges for Teacher Education will be Stephen M. Corey, dean of Teachers College, Columbia University, and Paul Woodring, professor of psychology at Western Washington University, presently on leave as consultant to the Fund for the Advancement of Education. They will discuss what constitutes a proper program of teacher education.

The meeting will be at the Conrad Hilton Hotel, Chicago, February 20 to 22.

## N.Y. Regents Propose Science Education Emphasis

ALBANY, N.Y.—The state board of regents here has recommended a multi-million dollar program to improve the teaching of science and technology. Estimated budgetary appropriations to institute the program are more than \$5 million.

The board proposes an early testing program to reveal children of high ability, followed by an extensive guidance program to motivate those with talents to use them effectively.

It was recommended that the number of regents scholarships be increased from 5 per cent of the graduating classes to 10 per cent.

The regents suggested that the state's boards of cooperative education, which work with minimal enrollment schools, provide outstanding science and mathematics teachers to be shared by two or more schools.

## Harvard Psychologist Invents "Teaching Machines"

NEW YORK.—Three "teaching machines" were demonstrated at the meeting of the American Psychological Association recently. Dr. B. F. Skinner, inventor of the machines, said that they grew out of his work in the Harvard psychological laboratories.

One device, designed to teach pre-reading problems to primary children, shows a simple problem in the window. The child must push a button for the correct answer.

A second machine for spelling and arithmetic problems shows the problem, and the pupil moves sliders to present letters or figures. If the answer is correct, the tape advances to the next question.

The third machine is a device for college and high school students to test themselves on simple numerical or letter answers.

Dr. Skinner says that with appropriate programming (by live teachers!) the machines can help fill demands for more education.

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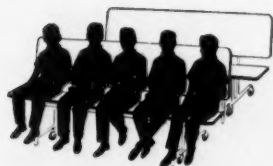
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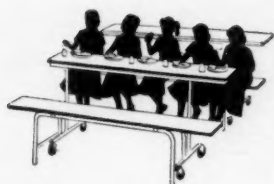
Please visit us in Booths B-7, B-9, NEA-AASA Show, Feb. 22-25, St. Louis, Mo.



# NEW SICO 2800 - BENCH-TO-TABLE UNIT



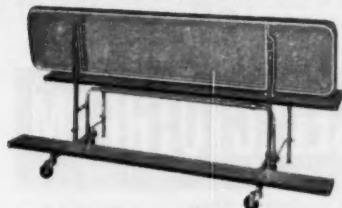
*it's a COMFORT-DESIGNED BENCH in a lecture hall*



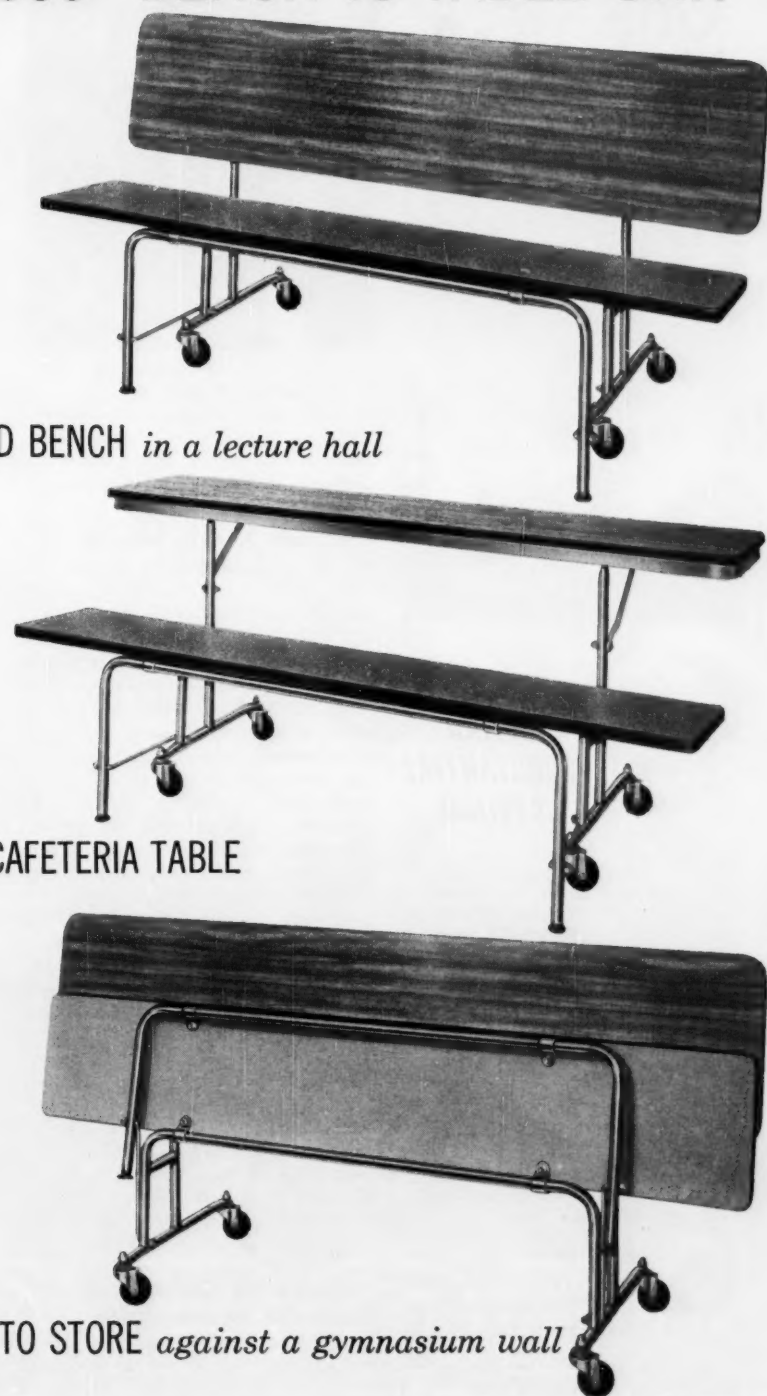
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*6 seconds later...READY TO STORE against a gymnasium wall*



*An integral kneeling bench is available as an accessory for Parochial schools.*



Now you can convert any multi-purpose room to a lecture hall, audio-visual, cafeteria or gymnasium and back again in minutes. The 2800 is quality engineered like all Sico System components: 14 gauge zinc lustron-plated steel chassis, melamine plastic school top, no locks, levers, or latches—all at an amazingly low price!

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The new officers of the National School Service Institute descend the stairway in this order: James W. Campbell, president; F. K. Steiner, first vice president; Warren C. Ashby, second vice president; Henry McCord, secretary, and L. B. Douthit, treasurer.

#### Principals Seek to Identify Needs of Tomorrow's Youth

INDIANAPOLIS.—"Secondary Schools for the New Era" will be the theme of the 42d annual convention of the National Association of Secondary-School Principals, scheduled to be in session here February 15-19. Program for the five-day conclave will comprise the following: nine general sessions, including concurrent meetings of the junior high and the senior high-junior college sections; 62 discussion groups on issues in high school administration; a business meeting, banquet, vesper service followed by reception, state breakfasts, luncheons and visits to schools.

Featured speakers will include the following: Commissioner of Education Lawrence C. Derthick; Carl C. Byers, former superintendent of Parma, Ohio, schools; James B. Conant, director, A Study of the American High School; Harold R. W. Benjamin, director, Connecticut Study of the Role of the Public Schools; Shane MacCarthy, executive director, President's Council on Youth Fitness; Robert J. Havighurst, University of Chicago; William T. Gruhn, University of Connecticut; and Jesse Stuart, principal, author and poet, Riverton, Ky.

#### Mathematics Contest Sponsored by Association

EDINBURG, TEX.—A secondary school mathematics contest will be sponsored in 1958 by the Mathematical Association of America and the Society of Actuaries. Last year some 40,000 students participated in a contest under New York sponsorship. Chairman of the contest committee is Prof. W. H. Fagerstrom of Pan American College, Edinburg, Tex. The contest has been approved by the National Association of Secondary-School Principals.

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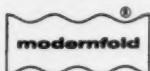
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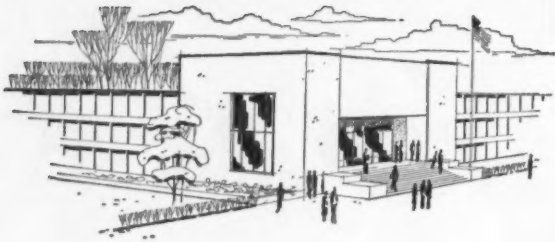


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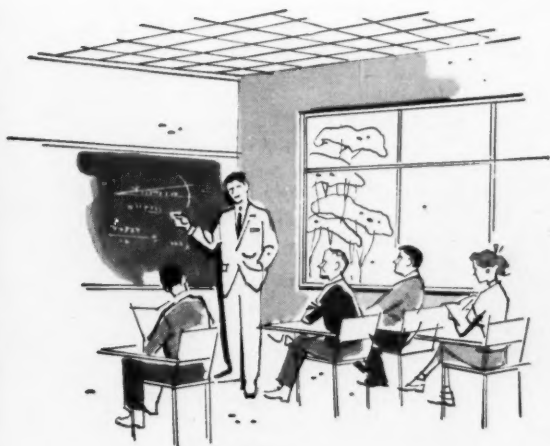
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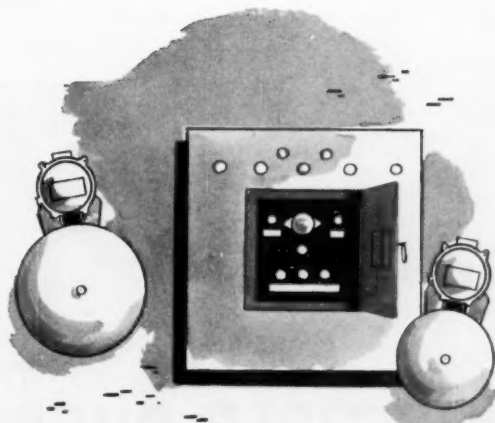
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## "All Education Levels Have Problems to Be Solved by Law," N.O.L.P.E. Members Told

PHILADELPHIA.—"All levels and fields of education have problems that must be resolved by law," Judge James W. Cammack of Kentucky Court of Appeals, told some 65 members of the National Organization on Legal Problems of Education. The group held its third annual meeting on the University of Pennsylvania campus November 7 and 8.

Some of these problems can be solved in courts of law; others must be solved in legislative halls, the judge asserted. Good school legislation must be phrased in

understandable and relatively simple terms. "Here the services of the trained bill-drafter are indispensable. He will know where the proposed measure should fit into the general statutes and can help avoid conflicts with other laws.

"The policies of public education for the most part are made in legislative chambers within the framework of constitutional provisions. On occasion, courts are called upon to interpret and define, in terms of legislative enactments, educational policy. In some instances courts

themselves are required to determine questions of educational policy on particular problems," Judge Cammack said in conclusion.

Thomas E. McMullin, vice-dean of the University of Pennsylvania School of Education, in welcoming the delegates, pointed out that all jobs or professions might be rated on a scale of technological or ethical complexity.

The job of an airplane pilot, Dr. McMullin explained, might be considered technically complex but relatively simple, ethically. In contrast, the task of the judge or the lawmaker is ethically complex. Close to that of the judge is the job of the teacher, also ethically complex. The audience before him, he noted, had interests in both law and education.

Thomas E. Woody, educational historian and professor of education, University of Pennsylvania, told the convention that liberal education must be education for free men. It must, in some degree, be for all men, and it must be so broadly based that it will contribute to the fundamental bases of man's life. Liberal education, he argued, must permeate all teaching.

In a follow-up to Dr. Woody's talk, E. Scully Bradley, vice-provost of the University of Pennsylvania, considered the educational implications of Dr. Woody's ideas. In so doing he used the substance of Dr. Woody's paper as the base upon which to build a kind of curriculum and methodology that would tempt greater numbers to think, to speculate, and to dare in intellectual activities.

Harry N. Rosenfield, attorney at law, Washington, D.C., discussed the legal implications of Dr. Woody's remarks. He called attention to changes that will have to be made and specific things that will have to be done in order to have the kind of liberal education envisaged by Dr. Woody; specifically, he noted that only free teachers can provide the education needed by free citizens.

Other topics considered during the two-day conference were: "Legal Problems Involved in the Enforcement of Compulsory Attendance Laws," "Problems Involved in the Reorganization of School Districts," "Reports on Recent Court Decisions of Particular Significance," and "Law and the Curriculum."

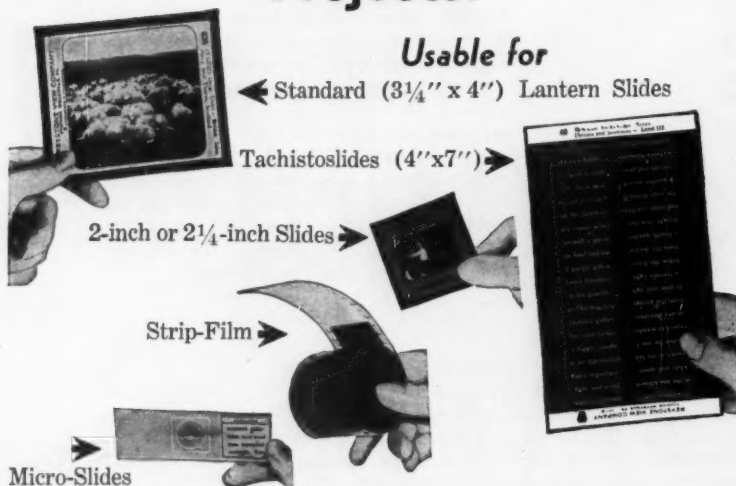
—Lee O. Garber

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## University of Pittsburgh Starts Educational Research

PITTSBURGH.—The University of Pittsburgh has established an office of educational research, to be directed by Putnam F. Jones, dean of the graduate faculty. The office will study curricular practices and experiments at other American universities and compare their values with the effectiveness and efficiency of the university's own program. First project will be the study of the trimester plan of school calendars.





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### College Teaching Deteriorates As Ph.D.'s Choose Other Fields

WASHINGTON, D.C.—A deterioration in the quality of college teaching staffs, especially in the field of science, is shown by the recently published N.E.A. study, "Teacher Supply and Demand in Colleges and Universities."

In 1956-57 only 23.5 per cent of all new teachers held the Ph.D. degree. Almost 14 per cent of all new full-time college teachers came directly from high school teaching positions. Seventy-five per cent of all science Ph.D.'s by-passed teaching for another career. About 42 per cent of the Ph.D.'s in all combined fields turned to other careers.

Educational work claims almost all of those earning the doctor's degree in the following fields: accounting, journalism, library science, physical education, English, foreign languages, history and education, it is pointed out.

### American Legion Reverses Stand on Teaching About Communism

INDIANAPOLIS.—The American Legion now urges that public schools add instruction to expose the many "fallacies of communism."

The new resolution calls for Legionnaires to work with school personnel to provide "suitable courses designed to deepen the understanding of and loyalty to American democratic ideals and institutions and to expose the fallacies of communism."

A \$20,000 gift from the women's auxiliary will finance the development of a textbook by the Legion's Americanism committee.

### Engleman Reports U.S.S.R.

#### Wants and Pays for Education

WASHINGTON, D.C.—"The per cent of their national income going to education is prodigious," says Finis Engleman. The country he describes is the U.S.S.R.

The A.A.S.A. executive secretary headed the U.S. delegation to the 20th international conference of the International Bureau of Education in Geneva.

Here is an excerpt from Dr. Engleman's report on the conference: "Careful evaluation of the participation and statements of the Communist countries, together with a rather careful analysis of their reports, leads me to the belief that they recognize that an extension of their influence on and power over the peoples of the world can be achieved by education and training the masses of their peoples. It is obvious that they place the schools ahead of almost everything in their mad rush for the world domination."

"The U.S.S.R. delegates reported that they put education on such high priority that they pay teachers better than any other professionals, including medical doctors."

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## Simulated Schoolhouse of Brick Withstands Atomic Pressures

LAS VEGAS, NEV. — A reinforced brick structure, 28 by 32 feet, large enough to serve as a classroom for 30 pupils, survived the atomic blast forces of the July "Plumbbob" nuclear test series here "with no apparent damage inside or out," the Federal Civil Defense Administration has reported. No cracks were noted in the walls, roof or at any other points.

The test building had reinforced brick walls 10 inches thick, a reinforced concrete flat roof, and was windowless. There were no cross walls. The 32 foot wall

length was oriented toward the blast. It was designed and located for a predicted load of 1500 pounds a square foot, while the other three walls were designed for testing at pressures of 750 pounds. There was an inward deflection of about  $\frac{1}{4}$  inch; however, there appeared to be no permanent deflection.

Sponsor of the building design, which was created to resist the destructive forces of powerful tornadoes and earthquakes, was the Structural Clay Products Research Foundation, Geneva, Ill., research arm of the nation's brick and structural tile industry, in cooperation with the Federal Civil Defense Administration.

## Finds College Costs Have Doubled; May Double Again

NEW YORK.—College costs today can vary from a low of \$240 to a high of \$6600 a year, according to Ernest V. Hollis of the U.S. Office of Education. He notes that the costs of a college education have doubled since 1940 and that they may double again by 1970.

Dr. Hollis has found that living costs consume five-sixths of the public college student's budget and two-thirds of the budget of the private college student.

Parents provide about 40 per cent of the total college bill, while savings of parents and grandparents account for another 20 per cent. Students earn about 25 per cent of their college funds. Scholarships, veterans' benefits, and loans make up the rest. Scholarships provide for less than 5 per cent of the total income of all students studied. The average award is less than \$300.

## Social Aspects Important in Alcohol Education: Sociologist

BERKELEY, CALIF.—What rôle should the high school play in alcohol education? The answer is a hard one, suggests a Michigan State University professor and sociologist.

Here's why: Research findings indicate that drinking is definitely a *social act* in most cultures, according to Prof. Christopher Sower; hence it is probably more important for the teen-ager to understand the social facts about drinking than to know the biological facts alone.

In this country, teen-age drinking reflects the widely varied adult drinking patterns in the American community, so there can be no set answer to alcohol education, Dr. Sower says. Alcohol education would have to be tailored for different communities, and even for different schools within the community, he believes.

"It would seem important for adults openly and frankly to admit that young people in the later teen ages today exercise many privileges and obligations that are normally defined as adult," he adds. "There seems little alternative except for society to grant such persons the right to decide for themselves whether they should drink, so long as such action does not result in detrimental effects upon either their own welfare or on that of others in society."

"A serious program of continuing research and experiments to develop methods of helping young people work out their own decisions about drinking would appear to be considerably more productive than further argument about the law," he concludes.

Dr. Sower addressed the North American Association of Alcoholism Programs here.



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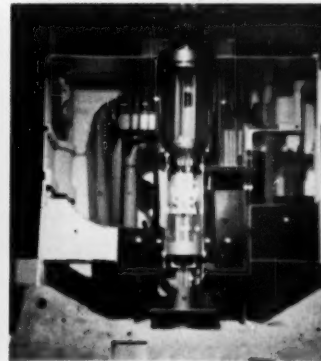
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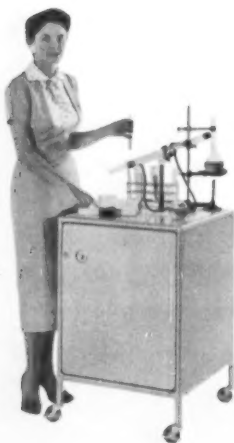
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**Atom, Atom, Yea Atom!** A New York state conference of educators, engineers and industrialists, meeting in Albany, warned that the public's feeling that bright mathematics and physics students were "eggheads" was impeding the nation's science education program. The conference proposed an honor for science students that would compare as a status symbol with the high school football letter.

**Little Drops of Water.** An increasing number of smaller bequests are providing substantial revenue for colleges, according to a report by the Committee on Bequest Services of Teachers College, Columbia University. Alumni with modest incomes often regularly give \$50 a year, and frequently provide in their wills for trust funds to keep up their gifts in later years.

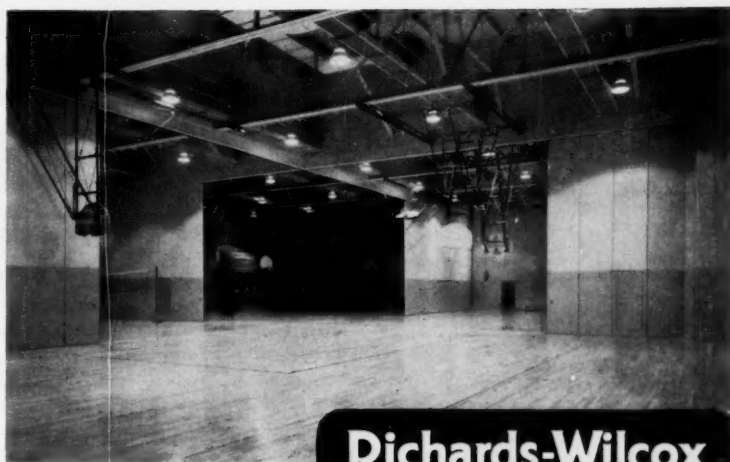
**U.S. Should Double Educational Support.** Government support for high schools, colleges and universities could be doubled without "overfinancing" education, according to M. L. Cushman, president of Phi Delta Kappa. He asserts that the value of the college graduate to society is greater than the dollar value of his diploma. Thus taxpayers should pay a high percentage of his higher education costs.

**New Birth Record in 1957.** The United States Public Health Service reports that 1957 is the seventh straight year to show an annual increase in the national birth record. The 1957 total is estimated at 4,318,000 babies, 98,000 more than the 1956 record total.

**Scientists Request Westchester Science School.** A group of New York scientists asked that a high school for 2400 gifted science students from all over Westchester County be established. A site near the Westchester Community College is proposed.

**School Population Increases 27 per Cent Since 1952.** The Census Bureau reported a total school and college enrollment of 41.2 million during 1957. Three-fourths of the increase was accounted for by population growth, the rest by a higher proportion of persons in older age groups enrolling in schools. Colleges and professional schools had 3.1 million students, as compared with 1.2 million in 1952.

**Another Russian First.** New York City school teachers will be able to take a course in Russian, beginning in February. Theodore Heubner, foreign language director of the board of education, said that 10 million Russians speak English while only about 4000 Americans speak Russian. American scientists and engineers may find Russian particularly useful in their studies of Russian scientific data.



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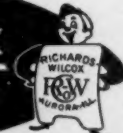
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## Virginia to Study Plans For Relief of Overcrowding

RICHMOND, VA.—A 14 member committee will study proposals for a four-quarter school year, double shifts, summer school programs, and other suggestions to make better use of Virginia's educational facilities. The committee will report to the governor and the legislature in September.

The study is spurred by mounting enrollments here. Increases from 565,074 in 1946-47 to an expected 924,500 students in 1962-63 have been noted.

The governor, Thomas B. Stanley, estimated that the study might cost \$25,000.

## ABOUT PEOPLE

### CHANGES IN SUPERINTENDENCIES

Carl Miles, former assistant superintendent at Centerville, Iowa, to superintendent there, succeeding E. W. Fannon.

George McCain, former Y.M.C.A. general secretary at Fargo, N.D., to superintendent at Wilton, N.D.

Wayne Frazer to superintendent at Atchison, Kan., replacing Charles Laferty, who becomes elementary superintendent at Oak Park, Ill.

Norland W. Strawn, former head of the extension department of Pittsburg

State College, Pittsburg, Kan., to superintendent at Tucumcari, N.M.

Lawrence H. Shepoiser from Mason City, Iowa, to Wichita, Kan.

John W. Hamilton to Childress, Tex., from Seymour, Tex., succeeding Newell H. Odell.

William L. Hare, former football coach, to Imperial, Tex., succeeding J. D. Brian.

Lee A. Richlen, from Bark River-Harris schools, Harris, Mich., to Powers-Spalding schools, Powers, Mich., succeeding Cyril Mantei.

Herman J. Dunseith, former administrative assistant in Royal Oak, Mich., to Monroe, Mich., as superintendent. He succeeds Fred E. Strong, now superintendent at Muskegon Heights, Mich.

Herbert N. Wicke, former principal at Union, Ill., to superintendent at Earlville, Ill., succeeding Leland T. Hansen.

Paul Hensarling, former acting superintendent, Aldine, Tex., to superintendent.

Maxwell Hamilton, from Pickford, Mich., to Lake Odessa, Mich.

### RESIGNED . . .



E. L. Bowsher

E. L. Bowsher, superintendent, Toledo, Ohio, for 20 years. Mr. Bowsher held the longest record of service in that post in the city's history. He will serve as secretary-manager of the Toledo Automobile Club. Mr. Bowsher was state superintendent of public instruction for two years, 1935 to 1937. Philo C. Dunsmore, assistant superintendent, has been named to succeed Mr. Bowsher under a new five-year contract.

Thomas L. Nelson, superintendent at Berkeley, Calif., for 13 years. When his resignation takes effect next June Dr. Nelson joins the architectural firm of Hansen and Winkler, San Francisco, as educational consultant. He was formerly a superintendent at Yuba City, Calif., from 1927 to 1938, and at Bakersfield, Calif., 1938 to 1945.



Thomas L. Nelson

Frederick F. Quinlan, superintendent at Lake Forest, Ill., for 15 years.

Walter J. Vorse, superintendent at Lynnfield, Mass., for six years.

Fox D. Holden, superintendent at Poughkeepsie, N. Y.

Carlyle C. Ring, superintendent at Jamestown, N. Y.

Joseph Beavo, superintendent for Jones County, Anamosa, Iowa.



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# KODAK SOLVES ANOTHER PROJECTOR WEAR PROBLEM

**New Kodak Pageant Sound Projector, Type II, adds new wearproof pulldown tooth to other long-life features**

Five years ago Kodak made the first in a long series of important 16mm projector innovations—*permanent pre-lubrication*. Since that time you've *never had to oil a Pageant Projector*, never had to worry about someone else oiling one improperly, or letting one run dry. You've been free of the commonest source of projector trouble, improper lubrication.

Now Kodak introduces a new type of pulldown mechanism with a tooth virtually *wearproof*, because it is made from *hard tungsten carbide*. This important advance will mean less maintenance, because a projector pulldown tooth is subject to continuing and relentless wear. It engages the sprocket holes in the film 24 times a second—

16,000 times during a 20-minute movie—billions of times in the projector's service life.

**Proved in use at Disneyland**, the new Pageant pulldown claw laughs at wear! In more than *2000 hours* (equivalent to about 5 years of normal use!) the tooth showed only a slight polishing, no grooving or flattening! (See magnified photo at right.)

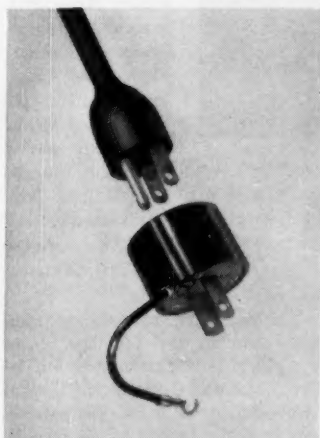
**Other new Pageant Type II features** are 1200-watt lamp capacity and a 3-wire power cord. (See pictures below.)

To get all the facts, write for illustrated brochure that explains why a Pageant Projector gives you brighter pictures, better sound fidelity, and sharper images.

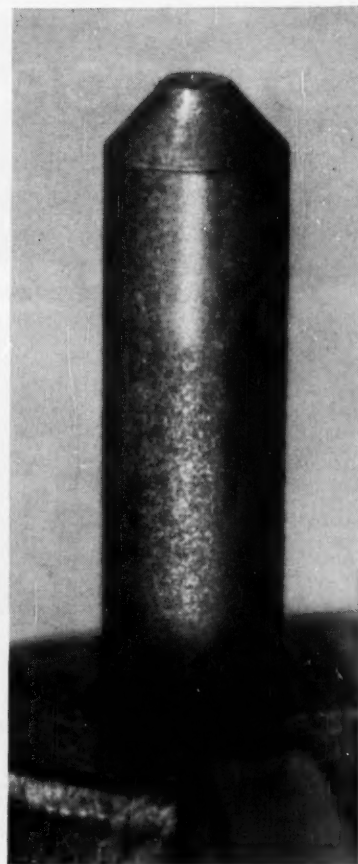
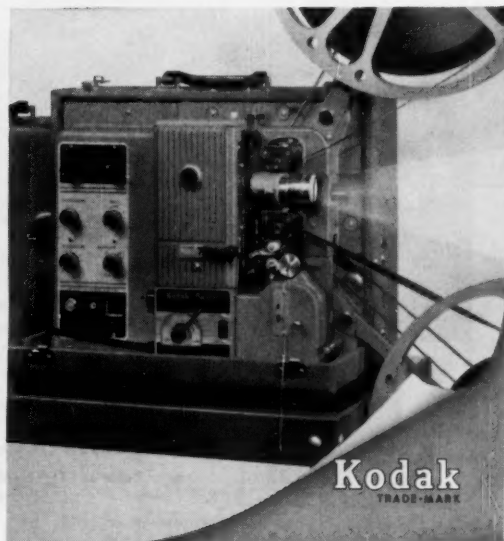
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NEW Kodak Pageant Sound Projector, Type II, has 8-inch speaker in baffled enclosure—15-watt amplifier—exclusive Kodak Super-40 Shutter—sets up easily with folding reel arms and belts attached.



HERE'S a magnified photo of the tungsten carbide tooth on the Pageant Projector pulldown mechanism, tested more than 2,000 hours at Disneyland. Notice it shows only slight polishing of the surface—no grooving or flattening.



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Charles C. Smith, superintendent at Bridgeport, Pa., for 25 years.

Howard S. Beard, superintendent at Porterville, Calif., for nine years.

Russell B. Spragg, superintendent at Bennett County, S.D., for 12 years, to accept a civil service teaching position.

## OTHER APPOINTMENTS . . .

Arthur W. Foshay, former Ohio State University director of the Bureau of Educational Research, to professor of education and executive officer, Horace Mann-Lincoln Institute of School Experimentation, Columbia University.

Edward C. Olsen, associate director of the National Conference of Christians and Jews, is on a year's leave of absence to be a lecturer and consultant, University College of Rhodesia and Nyasaland in Salisbury, Southern Rhodesia.

Herold C. Hunt, Eliot professor of education at Harvard, to serve as national program chairman of the National Conference of Christians and Jews.

Roy M. Hall, director of the Southwest School Administration Center at the University of Texas, Austin, and professor of educational administration there, to assistant



Roy M. Hall

research commissioner, U.S. Office of Education. Dr. Hall is a member of the Committee on the Advancement of School Administration for the A.A.S.A.

## DIED . . .

George Alan Works, 80, professor emeritus of education and former dean of students at the University of Chicago.

Frank M. Wright, associate state superintendent and chief, division of public school administration, Calif.



Loy Norrix

Dr. Norrix was a member of the A.A.S.A. advisory council. He was chairman of the Michigan Secondary Curriculum Study committee.

Carl D. Vermilya, 62, former superintendent for Putnam County, Ottawa, Ohio, from 1934 to 1950.

Jack Milligan, 51, an assistant state superintendent in the Michigan State Department of Public Instruction for the last four years and a member of the department staff for 20 years. He came to Lansing from the Detroit public schools.

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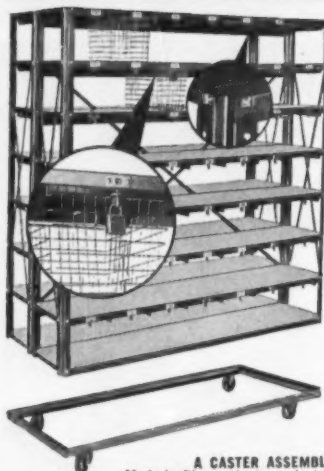
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## COMING EVENTS

### FEBRUARY

- 15. Susan B. Anthony Day.
- 15-19. National Association of Secondary-School Principals, N.E.A., 42d annual convention, Indianapolis.
- 20-22. American Association of Colleges for Teacher Education, N.E.A., annual convention, Chicago.
- 22-25. American Association of School Administrators, N.E.A., regional convention, St. Louis.
- 22-25. American Educational Research Association, regional meeting, St. Louis.

### MARCH

- 2-5. Association for Higher Education, N.E.A., 13th national conference, Chicago.
- 2-6. Association for Supervision and Curriculum Development, N.E.A., 13th annual convention, Seattle.
- 6-8. American Orthopsychiatric Association, 35th annual meeting, New York.
- 8-11. American Association of School Administrators, regional convention, San Francisco.
- 8-11. American Educational Research Association, regional meeting, San Francisco.
- 16-22. National Library Week.
- 22-26. Department of Elementary School Principals, N.E.A., annual convention, Philadelphia.
- 27-29. National Science Teachers Association, N.E.A., 6th national convention, Denver.
- 29-April 1. American Association of School Administrators, regional convention, Cleveland.
- 29-April 1. American Educational Research Association, regional meeting, Cleveland.
- 30-April 3. American Association for Health, Physical Education and Recreation, N.E.A., in cooperation with A.A.H.P.E.R. Central District, 60th annual convention, Kansas City, Mo.
- 31-April 3. American Personnel and Guidance Association, annual convention, St. Louis.

### APRIL

- 6-12. International Council for Exceptional Children, N.E.A., international convention, Kansas City, Mo.
- 9-12. National Council of Mathematics Teachers, N.E.A., 36th annual meeting, Cleveland.
- 17-19. National School Boards Association, Inc., 18th annual convention, Miami Beach, Fla.
- 21-25. Department of Audio-Visual Instruction, N.E.A., annual national convention, Minneapolis.

### MAY

- 9, 10. International Reading Association, 3d annual conference, Milwaukee.
- 18-21. National Congress of Parents and Teachers, annual convention, Omaha, Neb.

### JUNE

- 29-July 4. National Education Association, annual convention, Cleveland.
- 30. United Business Education Association, N.E.A., annual meeting, in conjunction with N.E.A. annual convention, Cleveland.

### JULY

- 26-29. National Audio-Visual Convention, Chicago.

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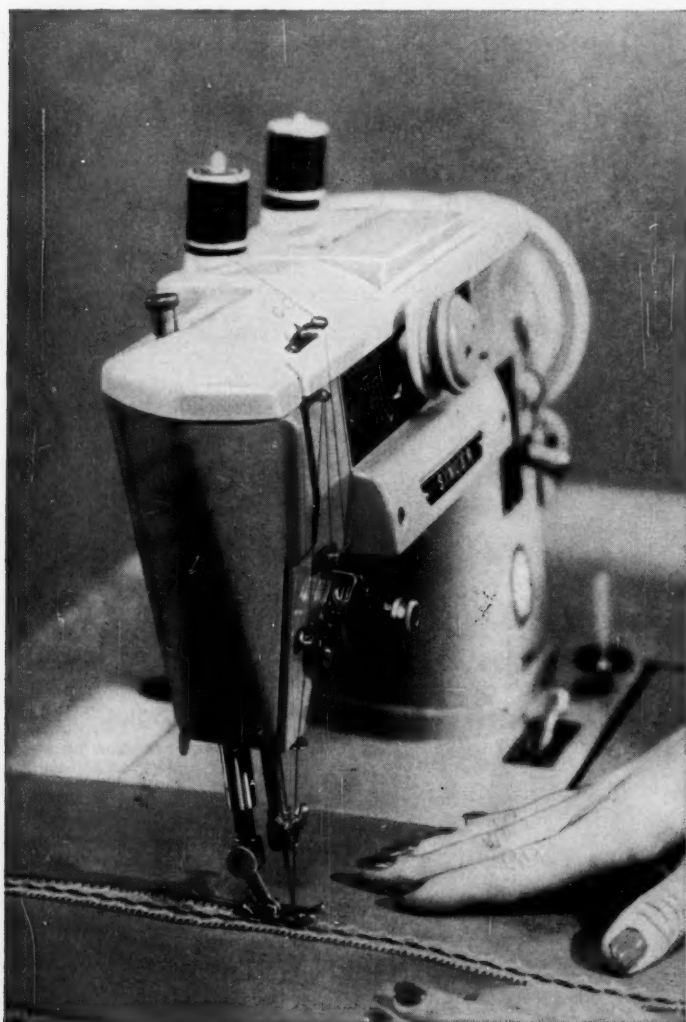
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## BOOK REVIEW

### Teacher's Guide to Income Tax Savings

THERE is no patriotic duty to increase one's taxes," the author of this manual reminds her readers, "and anyone may so arrange his affairs that his taxes shall be as low as possible." To help teachers find the pattern which will allow them to reduce their tax burden legally is the purpose of this book. A number of small tax savings are likely to add up to enough to really amount to something, says the author, yet many teachers are figuratively throwing away many dollars when they neglect to take

advantage of the tax exemptions to which they are entitled.

Madaline Kinter Remmlein since 1940 has worked with the Internal Revenue Bureau in amending, revising, drafting and at times testing in court the special provisions of the Internal Revenue Code affecting teachers. In portions of her book she is intensely critical of the garbled status of treasury regulations, particularly on such typical teacher expenses as tuition costs for educational study. Ways are recommended in which school boards

and the teachers themselves can cope with tax problems.

Emphasizing that the manual was written by a teacher for teachers, Mrs. Remmlein covers income tax problems step-by-step—from the choice of the best return form to the filing of a declaration of estimated tax. In addition to being a teacher (she has been a professional lecturer in school law at various universities), the author also is a member of the American Bar Association and qualifies as a tax specialist. As such, she advises that certain teachers this year should avoid early filing to await possible changes in regulations occurring between January 31 and April 15. "Road markers" along the way permit use of the book as a reference manual in minimum time. Such guide lines as "All teachers should read this chapter," "All teachers should read at least the first two paragraphs," and "Retired teachers only need read this chapter" are typical to short cuts.

**TEACHER'S FEDERAL INCOME TAX GUIDE, 1958 edition.** By Madaline Kinter Remmlein, assistant director, research division, National Education Association. Channel Press, Great Neck, N.Y. Pp. 160. \$2.

Pointing out that many teachers have income from employment or self-employment in addition to their school salaries, Mrs. Remmlein offers counsel on these matters, as well as for the more fortunate who have investment, interest and rental income. As an illustration, a form is filled in for a "John Brown" who "saves" several hundred dollars by following the authoritative recommendations in the guide. While the volume is titled for "teachers," the guide will help other individuals identified with the educational field.—Leo E. Buehring. #

## THE BOOKSHELF

### ADMINISTRATION

**Helping Teachers Understand Principals.** By Wilbur A. Yauch, Northern Illinois University. Appleton-Century-Crofts, 35 W. 32d St., New York 1. Pp. 98. \$1.10.

**Shoring Up Legal and Policy Provisions for the Superintendent.** American Association of School Administrators, N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 24. 50 cents.

**A Strategy for American Education.** Possible school system adaptations to meet new demands on education. By Robert Hendry Mathewson, guidance training program director, New York City Board of Higher Education. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 296. \$5.

**Cooperative Procedures in Education.** By Edgar L. Morphet, professor of education, University of California, Berkeley. Hong Kong University Press, Hong Kong, China. Pp. 31. 40 cents.

(Continued on Page 122)

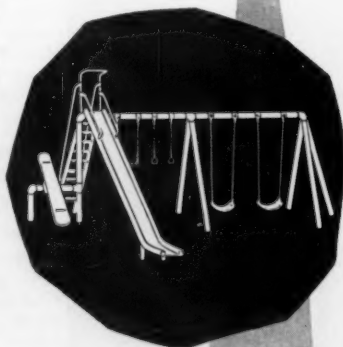
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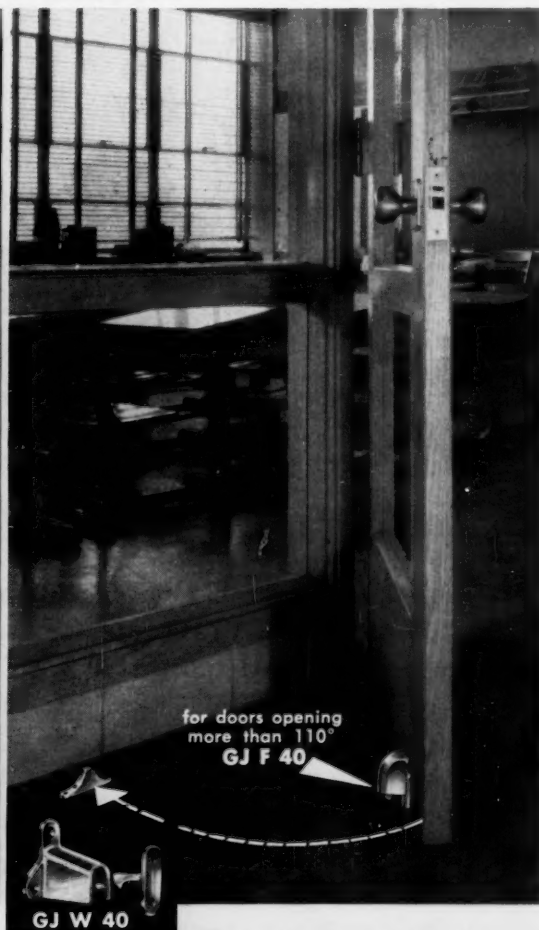
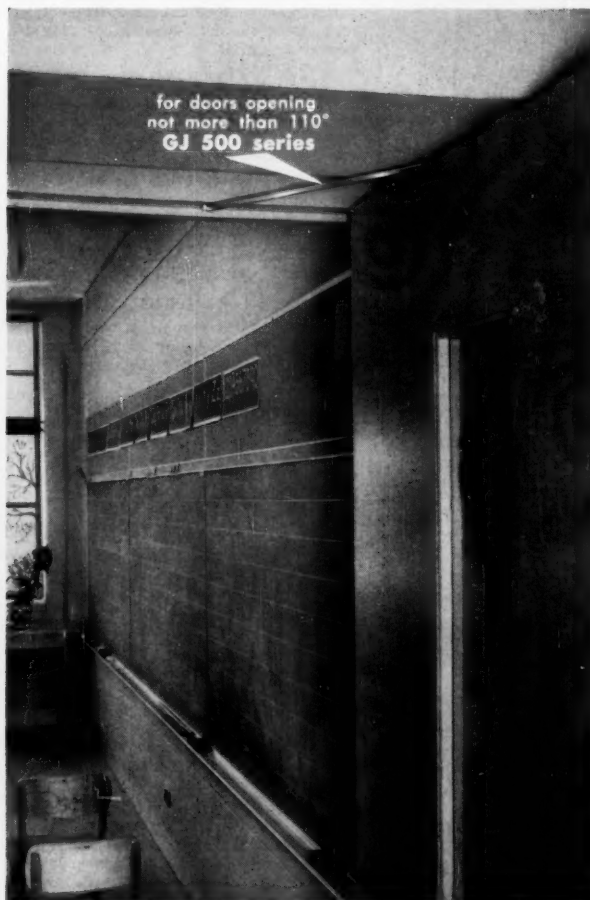
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Wellesley Senior High School Addition, Wellesley, Mass. Perry Shaw Hepburn & Dean, Boston, Mass. — architects

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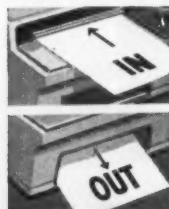
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**With All Deliberate Speed.** Segregation-Desegregation in Southern Schools. Edited by Don Shoemaker, executive director, Southern Education Reporting Service. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 239. \$3.50.

#### ANNUAL REPORTS

**Denver Public Schools Forty-Ninth Statistical Report.** By Kenneth E. Oberholtzer, supt., Denver Public Schools, 414 14th St., Denver 2. Pp. 56.

#### AUDIO-VISUAL

**Educators Guide to Free Tapes, Scripts, and Transcriptions.** Fourth annual edition, 1958. Educators Progress Service, Randolph, Wis. Pp. 206. \$5.75.

**U.S. Government Films for Public Educational Use. Supplement No. 1.** By Seerley Reid, chief, visual education service, and others. Bulletin 1957, No. 6, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 92. 35 cents.

#### CAMPING

**The Successful Camp.** A handbook for the camp administrator. By Lewis C. Reimann. University of Michigan Press, Ann Arbor. Pp. 233. \$4.75.

#### COLLEGE PREPARATORY

**How to Study.** A book for students who plan to go to college. By Clifford T. Morgan and James Deese, Johns Hopkins University. McGraw-Hill, 330 W. 42d St., New York 36. Pp. 130. \$1.50.

**Learn More With Less Effort.** A book for college students and prospective college students. By George J. Dudycha, professor of psychology, Wittenberg College. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 240. \$2.75.

**How to Be Accepted by the College of Your Choice.** By Benjamin Fine, New York Times education editor. Channel Press, Great Neck, N.Y. Pp. 134. \$3.95.

#### COMPARATIVE EDUCATION

**Germany Revisited.** Current education in the Federal Republic of Germany. U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 107. 55 cents.

**Education in the U.S.S.R.** Division of International Education, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 226. \$1.25.

#### CURRICULUM

**Social Studies Skills.** With individual self-testing key. By Forest E. Long and Helen Halter. Inor Publishing Co., 203-205 Lexington Ave., Sweet Springs 1, Mo. Pp. 150. \$2.40. Key, 20 cents.

**Resources for the Future.** Annual report. Resources for the Future, 1145 19th St. N.W., Washington 6, D.C. Pp. 89.

**Responsible Citizenship.** Suggested class activities for the Theodore Roosevelt Centennial observance. Theodore Roosevelt Association, 28 E. 20th St., New York 3. Pp. 48.

**Improving the Arithmetic Program.** By Leo J. Brueckner. Appleton-Century-Crofts, Inc., 35 W. 32d St., New York 1. Pp. 120. \$1.25.

**Review of Research in Business Education.** By Earl A. Dvorak. Division of Research and Field Services, Indiana University, Bloomington. Pp. 104. \$1.

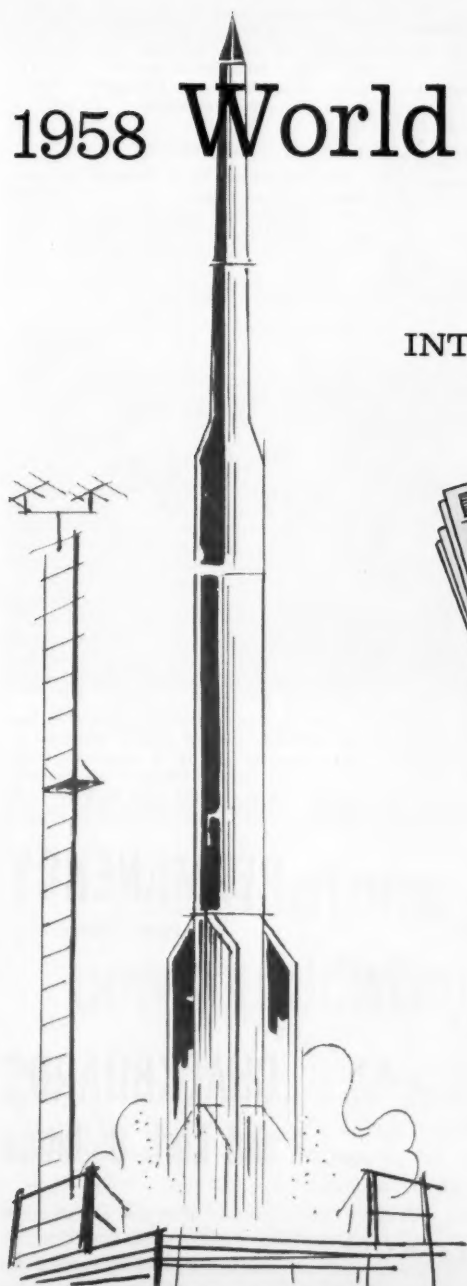
#### DIRECTORIES

**Education Associations.** Education Directory, 1956-57, Part 4. U.S. Office of Education, U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 79. 30 cents.

**Lovejoy-Jones College Scholarship Guide.** By Clarence E. Lovejoy and Theodore S.

# 1958 World Book Encyclopedia

AS CURRENT AS THE  
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At these meetings, scientists exchange technical information on the development of space travel.

**Artificial Satellites.** Russian scientists launched the first artificial satellite on Oct. 4, 1957. The Russians announced that the ball-shaped device circled the earth at a maximum altitude of 560 miles. The satellite's initial speed of 18,000 miles an hour carried it around the world once every 93 minutes. A three-stage rocket took it into space. The Russian satellite weighed 184 pounds and had a diameter of 23 inches. Its radio equipment sent signals back to earth. Russian plans called for launching additional satellites as part of the International Geophysical Year (IGY). The wide program of scientific research on atmosphere began in July, 1957, and ended in December.

*From Space Travel article in the 1958 World Book*

World Book Encyclopedia for 1958 is so complete, so up to date, that it practically records history as it happens! The "sputnik" story is only one example. There are new, important articles on radar and radio; on modern Canada and ancient civilizations. In all, the editors of World Book have added or revised more than 1,200 authoritative articles. More than 2,000 pages have been revised, including new maps, illustrations, and other visual aids.

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Jones. Simon and Schuster, Rockefeller Center, 630 5th Ave., New York 20. Pp. 123. \$3.95 (cloth), \$1.95 (paper).

**World-Wide Graduate Award Directory.** Advancement and Placement Institute, Box 99, Greenpoint Station, Brooklyn 22. Pp. 28. \$2.

#### FROM U.S. OFFICE OF EDUCATION

**Statistics of Public School Libraries 1953-54.** Biennial survey of education in the United States, 1952-54, chapter 6. Pp. 73. 30 cents. **Preliminary Statistics of State School Systems 1955-56.** Pp. 4.

**Instruction in Farm Mechanics.** Training program for vocational agriculture. Pp. 63. 35 cents. U.S. Office of Education, U.S. Govt. Prtg. Off., Washington 25, D.C.

#### FROM SCHOOL DISTRICTS

**What Secondary Schools Can Do About Teenage Narcotics Addiction.** Pp. 27. 10 cents. **English Language Arts: Grades 7-8-9.** Pp. 112. 40 cents. **General Metal Shop.** Teacher's manual for grades 7-9. Pp. 224. **Secretarial Practice for High Schools.** A course syllabus for senior year secretarial students. Pp. 82. 50 cents. **WNYE Radio-Television Manual.** To be used by teachers who have their classes watch TV programs for supplementary class material. Pp. 224. 50 cents. Board of Education, New York City, 110 Livingston St., Brooklyn 1.

**Patriotic Occasions.** Suggestions and materials for observances. Los Angeles County Schools, C. C. Trillingham, supt., Los Angeles 12. Pp. 20.

#### HIGHER EDUCATION

**Backing Up Brains.** Directing attention to the critical need for higher salaries for

teachers in institutions of higher education. Council for Financial Aid to Higher Education, 6 E. 45th St., New York 17. Pp. 16. 25 cents.

**Qualities of Experience for Prospective Teachers.** Experimental edition. By the joint committee of the A.A.C.T.E. and the Philosophy of Education Society. John P. Wynne, director of study. American Association of Colleges for Teacher Education, 11 Elm St., Oneonta, N.Y. Pp. 125. \$1.

#### HOME ECONOMICS

**The Challenge for Home Economics.** Addresses delivered at the dedication of Bevier Hall and Child Development Laboratory, University of Illinois. University of Illinois Press, Urbana. Pp. 57.

#### INSERVICE EDUCATION

**Evaluating the Inservice Education Program of Your Community School.** Michigan Department of Public Instruction, Lansing 2. Pp. 12.

**Person Centered Inservice Education, Why Not?** Bulletin of the Bureau of School Service, Vol. 30, No. 1. University of Kentucky, Lexington. Pp. 41. \$1.

#### PERSONNEL

**Supervisory Personnel Development.** A guide for organizing trade and industrial training programs. Earl M. Bowler, assistant director, trade and industrial education branch, Division of Vocational Information, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 40. 25 cents.

**The Postwar Struggle to Provide Competent Teachers.** Research Bulletin Vol. 35, No. 3. National Education Association, Research Division, 1201 16th St. N.W., Washington 6, D.C. Pp. 29. 80 cents.

**California's Need for Teachers.** By Carl A. Larson, specialist in teacher education. Division of State Colleges and Teacher Education. Bulletin 35 No. 10, California State Department of Education. Calif. State Prtg. Office, Sacramento. Pp. 47.

#### PSYCHOLOGY

**The Adolescent Views Himself.** A psychology of adolescence. By Ruth Strang, professor of education, Columbia University. McGraw-Hill Book Co., 330 W. 42d St., New York 36. Pp. 581. \$7.95.

#### RESEARCH

**Research Studies in Education, 1956.** Continues series of classified listings of educational research publications started by Phi Delta Kappa in 1953. Phi Delta Kappa, Inc., 8th St. and Union Ave., Bloomington, Ind. Pp. 114. \$3.

#### UNITED NATIONS

**Basic Facts About the United Nations.** Pp. 47. 15 cents. **A Sacred Trust.** The work of the United Nations for dependent peoples. Pp. 39. 25 cents. **World Facts and Figures.** Changes mirrored in statistics. A United Nations Review reprint. Pp. 42. 25 cents. **For Human Welfare.** A discussion guide on the work of the Economic and Social Council. Pp. 48. 25 cents. United Nations Department of Public Information, International Documents Service, Columbia University Press, 2960 Broadway, N.Y. 27.

**Current School Enrollment Statistics.** Pp. 47. 50 cents. **Primary School Curricula in Latin America.** By M. B. Lourenço Filho. Pp. 36. 75 cents. UNESCO Publications Center, 152 W. 42d St., New York 36.

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## Mansions Converted to School Buildings

GLEN COVE, N.Y.—Several of Long Island's North Shore mansions have been converted to halls of learning. Outstanding examples are the Walter P. Chrysler estate, which is now the United States Merchant Marine Academy; Planting Fields, the estate of the late William Robertson Coe, now being used as a teachers college by New York State University, and Hillwood, the estate of Mrs. Marjorie Merriweather-Post, now the site of C. W. Post College.

In Great Neck, the mansion of the late Henry Phipps is now the admin-

istration building for the public school district. School districts have also purchased small homes and converted them into neighborhood primary schools.

## Soviet Pupils to Stop Sunday Homework

Moscow, U.S.S.R.—Moscow radio has announced that in order to "reduce the strain on school children" Soviet pupils will not be required to do homework on Sundays in the future, according to a U.P. dispatch.

Previously, work had to be prepared on Sundays and presented on Mondays by all pupils except those in the first three grades.

## University Freshmen Suggest High School Changes

URBANA, ILL.—A group of freshmen at the University of Illinois have suggested improvements in high school college preparatory courses.

Among the suggestions were: more themes and essay type of questions in examinations, return of graded papers with the requirement that errors be corrected, more formal grammar and writing, a required knowledge of how to organize material for papers, and advice on high school programs, especially language requirements.

In general, most students believe that they went through too much meaningless detail work that was of little value to them in building the kind of study habits needed in college.

The students were replying to an invitation by university officials to discuss the questions: "How are you finding college? How could you have been better prepared for it?"

## Find Handicapped and Normal Children Gain From Each Other

NEW YORK.—Is it advantageous to have handicapped children in the same classroom with their normal peers?

At the preschool level, Alice Jerome, director of the Park Nursery School here, has found the experience has some value for both normal and handicapped.

Over a seven-year period, the nursery school has had 15 preschoolers with mild handicaps; however, not more than one handicapped child is usually included in a group of from 12 to 15 normal children.

For the handicapped child being with a normal group helps him face his handicap at an early age, in a sympathetic, supervised situation. Acceptance from the group helps him to develop, Mrs. Jerome believes.

The nonhandicapped child learns that people can be different and still make good playmates; in some cases, he may discover that the handicapped child has a special contribution to make, she says. However, Mrs. Jerome has also found that having a handicapped child in a group may add to the fears of an already fearful child.

## Oak Ridge Institute Opened for Saturday Student Tours

OAK RIDGE, TENN.—Science teachers may take student groups of as many as 200 students on Saturday tours of the atomic energy installations here. School groups are expected to furnish their own transportation and meals. A scientist acts as luncheon speaker for the group.

Educators interested in the tours should write to: Student Educational Tours, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.



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## Greater Student Responsibility for Studies Is Urged

DETROIT.—Secondary schools would be forced to raise their standards of education if colleges would refuse to teach subjects on the subfreshman level, according to Clarence B. Hillberry, president of Wayne State University.

Dr. Hillberry proposes a radical alteration in the present college program of from 15 to 18 hours each semester of closely supervised study. He suggests a reduction in the required and rigidly directed work, built chiefly around lectures. He recommends a two-hour reduction in the second-semester freshman year with progressive reductions leading to a 12 hour reduction in the senior year. Students would be made responsible for this work and rigorously tested in it.

## Parents Start Special School for Disturbed Children

HALEDON, N.J.—A school for emotionally disturbed children, founded here in 1954, now accommodates children from Bergen, Passaic, Essex and Morris counties, according to Milton Honig, writing in the *New York Times*.

The school is sponsored by the Northern New Jersey Chapter of the League for Emotionally Disturbed Children. Mothers of the children run a thrift shop in near-by Paterson, the profits of which

augment the \$750 tuition, which only covers half the school's expenses.

The school was founded by four parents to provide educational and social benefits to their children who could not be admitted to a public school.

Mrs. Louise Emery, director-teacher of the school, said that developmental rather than academic progress is stressed. The school maintains a 3 to 1 pupil-teacher ratio.

## New Jersey Senator Calls for More School Construction

WASHINGTON, D.C. — Sen. Clifford P. Case (R.-N.J.), in a recent public statement, declared that federal aid for school construction should be the keystone of the federal education program, not just a means to get more scientists and technicians. "It would be a mistake to concentrate on science," he said.

"It is in the classrooms that the brain-power will be developed," he added, saying that the provision of adequate schools should be as much a part of our defense program as are rockets and intercontinental missiles.

## Teacher Can Assist in Social Acceptance of Handicapped

FLINT, MICH.—The teacher's attitude can help to break down the barriers that often exist between handicapped children and their more normal peers, a Univer-

sity of Michigan professor told a meeting of the Michigan Association for Crippled Children and Adults recently.

Prof. John R. P. French Jr. said that physically handicapped children suffer many of the same social and psychological problems that any minority group faces; often they are not accepted socially by their classmates.

## College Integration Plan Adopted in Tennessee

NASHVILLE, TENN.—Six of Tennessee's state operated colleges will desegregate next September. The state board of education empowered each college to establish minimum requirements for admission of new students. Requirements "shall apply equally to all prospective students."

The new plan replaces the gradual desegregation which was to have resulted in full integration by the fall of 1959.

## Former Student Gives Million to Wittenberg

SPRINGFIELD, OHIO.—Wittenberg College has received an unrestricted gift of \$1 million from an electronics engineer whose physics professor 34 years ago helped him borrow the \$200 he needed to complete his studies at Wittenberg.

Prior to this gift, the donor, Stanley Hanley of Columbus, Ohio, had given \$167,000 for endowment funds.

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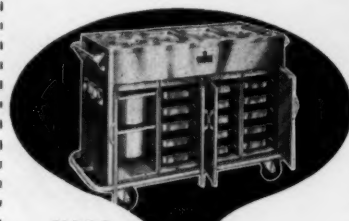
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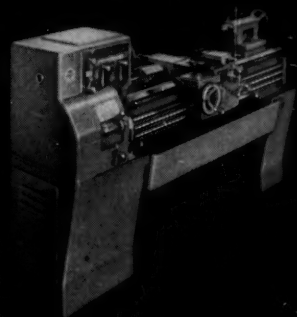


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## Council Offers Guide for Coordinating Secondary School Program and Plant

**SECONDARY SCHOOL PLANT PLANNING.** By a Special Committee on Secondary School Plant of the National Council on Schoolhouse Construction, Wilfred F. Clapp, chairman. Approved for publication by the Council's Committee on Research and Publications, Lloyd L. Waite, chairman. Secretary of the Council: W. D. McClurkin, Peabody College, Nashville 5, Tenn. Pp. 83. \$1.

**T**HIS is not a craftsman's handbook, but rather a guide for schoolmen con-

fronted with schoolhouse construction problems. A complicating factor in offering advice on secondary schools, of which an unprecedented number must be erected during the coming decade, is the dynamic and changing nature of the secondary school program. In a democracy, a secondary school will change as society changes and as more is learned about learning and growth, the editors point out.

The seven editors readily admit that the National Council on Schoolhouse

Construction cannot decide what the present or future secondary education program of a community should be, and that their book cannot prescribe what the secondary school *building* should be. They do urge, however, that basic thinking concerning the program be regarded as a first step in the planning.

Proceeding on this premise, "Secondary School Plant Planning" suggests how the planning program should be organized and who should be involved. The listing of 16 characteristics of educational specifications should be of genuine help to school planners.

One chapter reports on educational changes in school organization, curriculum, methods and relation to the community. The importance of planning a high school for maximum educational usefulness is stressed, it being emphasized that no school building is really worthy of being safe, beautiful, comfortable or economical unless it provides a maximum of facilities for learning.

Instructional space, the guide underscores, must be so designed as to work hand-in-hand with the teacher in providing an environment which encourages the right kind of learning. Rooms should be designed for learning, rather than for teaching, since "many things have been taught in our secondary schools which have not been learned" and "much has been learned that no one intended to teach." Classrooms are discussed, as are general service facilities, in the light of "the growing realization that student experiences and associations *outside* the classroom point out the necessity for careful planning for all facilities." The dining area, for instance, is dealt with as "an important educational resource which can no longer be considered solely as a place to feed a given number of students in a fixed period of time."

A penetrating analysis is made of the five basic environmental elements—spatial, thermal, sonic, visual and esthetic. Included in the visual section are recommendations as to desirable brightness-differences in schoolhouse lighting. Artificial and daylighting of all instructional and service areas are explored. The auditorium and the multipurpose room are examined separately as to environmental features.

Since this volume represents the official pronouncements of an association which has pioneered and continues to maintain a prominent position in the schoolhouse planning field, "Secondary School Plant Planning" probably will be looked upon as the Bible in this area.—L.E.B.

**Russian Says U.S. Leads in Pure Science.** The Soviet Union's leading physicist, D. I. Blockhintsev, participating in an international symposium in Palo Alto, Calif., says that the U.S. holds the lead in research for knowledge that may not be immediately applicable.

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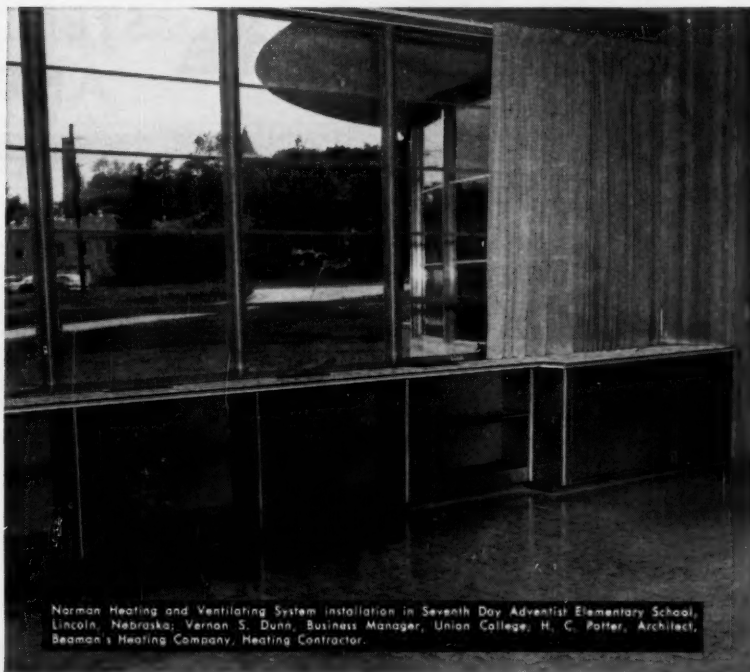


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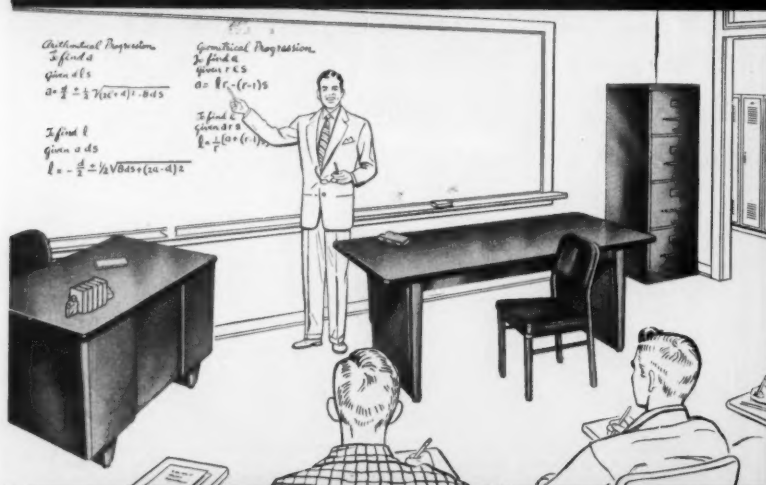
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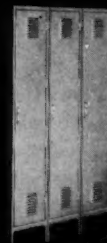


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Modern in design... functional, rugged and dependable. ASE Steel School Furniture and Lockers provide lasting service, attractive appearance and day-to-day efficiency. Bonderite treated to assure a lustrous, permanent, corrosion-resistant finish. Write now for more information.



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TEACHER'S DESK



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BLUEPRINT  
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There's an ASE Dealer Near You



ALL-STEEL EQUIPMENT INC.  
AURORA, ILLINOIS

# What's New FOR SCHOOLS

FEBRUARY 1958

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 164. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

## Bench-to-Table Unit Serves Dual Purpose

The new 2800 Bench-to-Table unit is a versatile piece of seating equipment which can serve as a bench or a table.



When the top is folded down to form a back, it becomes a comfortable bench. With the top lifted to a horizontal position, it becomes a table. A kneeling board which also folds is available as an optional accessory. Three-inch wheels roll the unit easily to storage when top and bench are folded vertically. The design permits operation of the unit even by a child as there are no locks, levers or latches.

The chassis is constructed of 14-gauge plated steel and the 15-inch table top is bonded with melamine plastic. The bench-table combination is available in lengths of six, seven and eight feet, 27 and 29 inches high. Sico Mfg. Co., Inc., 5215 Eden Ave. S., Minneapolis 24, Minn.

For more details circle #91 on mailing card.

## Vinyl Impregnated Book Cloth Is Sturdy and Scrubbable

The result of years of research, the new "PX" vinyl impregnated book cloth has excellent film quality with high scrub resistance. Developed by Du Pont, the announcement states that the new material has "markedly superior properties to pyroxylin impregnated material" and should make more attractive and durable annuals, catalogs and textbooks. The new cloth presents a more uniform printing surface, permitting better lithography with more complete ink coverage and truer reproduction of colors. The new material is available in three grades in the Shriners grain. E. I. du Pont de Nemours & Co., Room D-8033, Wilmington, Del.

For more details circle #92 on mailing card.

## Increased Screen-Light With Sound Projectors

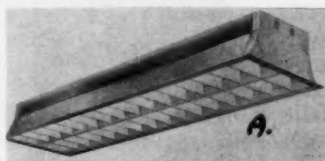
Newly developed 1200-watt lamps are

used with the two new 16mm sound motion picture projectors introduced by RCA. Greater efficiency and longer operating life are features claimed for the new projectors which produce appreciably more light on the screen than the conventional 1000-watt lamps. The new dual-case 15-watt unit with separate speaker is designed for use with audiences of approximately one thousand, while the single-case 7-watt model has a built-in speaker and is designed for use with audiences up to 400 persons. The two new projectors feature built-in lubrication for all moving parts, long-life film-pressure guides and special protective casing highly resistant to scuffing, abrasions and other marring. Radio Corp. of America, 30 Rockefeller Plaza, New York 20.

For more details circle #93 on mailing card.

## Louver Fin Lighting Troffer Reflects Light Downward

The parabolic contour of the new Curtis louver fin design lighting troffer is engineered to reflect light downward onto the work surface. At the same time, light is reflected away from the critical viewing angles, reducing glare and brightness. The



new louver fin, called LBQ (Low Brightness Quality), is available with the new line of Curtis Eye-Comfort Alzak troffers.

Another important feature of the LBQ design is its extreme rigidity which eliminates the possibility of damage and misalignment during shipping, installation, cleaning or relamping. The extruded aluminum of the parabolic cross section has a diffuse Alzak finish which is easily cleaned with a dry cloth. The series also includes a heavy duty flat Alzak louver fin and a unit without louvers. Troffers are also furnished in steel construction with flat fins and white Fluracite finish. The new louver fins are engineered to provide high levels of illumination with maximum visual comfort and excellent control of glare and brightness. Curtis Lighting, Inc., 6135 W. 65th St., Chicago 38.

For more details circle #94 on mailing card.

## Improved Nibroc Towels in Two Colors

White and natural Nibroc Towels are now offered in the improved quality. The new improved towels have greater ab-

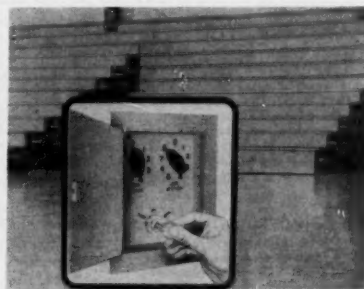
sorbency so that one towel will dry the hands. Their wet-strength has been increased, yet they are softer than ever and free from lint. Nibroc improved white towels are made with a new bleaching process for extra whiteness and offered in the No. 2220 Double Multifold. Nibroc improved towels in natural tone are available in Senior and Junior Multifold and Singlefold. Brown Co., Berlin, N.H.

For more details circle #95 on mailing card.

## Power-Operated Unit for Gymnasium Seating

A simple operating mechanism completely self-contained within the seat units of automatic power-operated telescopic gymnasium seats is remote-controlled by a dial-set key-operated switch that may be installed at any convenient location in the gymnasium. The key-operated control switch opens and closes any seat section, from the largest to the smallest, smoothly, quietly and quickly, with a setting of the dial indicator and a turn of the constant-pressure switch key. Release of the key stops movement instantly when the desired number of rows are in position. The seats roll open or closed without binding and sections automatically lock in any position during opening or closing on release of the switch key. They remain safely stationary until power control is again actuated by use of the key.

The new power-operated units can be installed without floor tracks or building changes and require no unusual structural conditions other than those needed for manually-operated seats. Any 110 or 220-volt power source can be employed for operation. Since operation is smooth and quiet, seats are not damaged by slamming and require less maintenance while giving longer service. The new Medart power



operation can be installed on Medart Telescopic Gym Seats installed since 1954 without extensive or costly changes in seat construction. Fred Medart Products, Inc., 3535 DeKalb St., St. Louis 18, Mo.

For more details circle #96 on mailing card.

(Continued on page 134)





This roof is there to stay. Strong, concrete slabs are precast in factory, go up fast, save money.

## Build Your School Fast, Open on Time With New System of Firesafe Concrete

Nothing stops the calendar, but you can save days and dollars on your next school building if you just remember Flexicore when you plan. Flexicore precast concrete floors and roofs go up in a few hours, are ready to work on at once, save weeks of construction time. Look at the pictures on the right and you can see the beautiful ceilings you get just by painting the smooth Flexicore slabs. And with a minimum of acoustical treatment you get ideal hearing conditions. These reinforced concrete slabs make the strongest floor or roof you'll ever want, and you never have to worry about fire because there is nothing to burn. Our job is to help you build better schools quicker, for less money. Ask your architect about Flexicore, or mail coupon to address nearest you.

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Makes attractive exterior.



Just paint the slabs . . .



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Address \_\_\_\_\_ State \_\_\_\_\_

ALABAMA, Birmingham 1  
The Alabama Cement Tile Co.  
COLORADO, Denver 1, PO 366  
Flexicore Company of Colorado  
FLORIDA, Tampa, PO 2189  
American-Marietta Company  
ILLINOIS, Chicago, Franklin Pk.  
Mid-West Flexicore  
INDIANA, E. Chicago, PO 539  
Columet Flexicore Corporation  
MICHIGAN, Livonia, PO 2006  
Price Brothers Company  
MINNESOTA, St. Paul E-4  
Malin Concrete Products Co.  
MISSOURI, E. St. Louis, Ill.  
St. Louis Flexicore Inc.  
NEW JERSEY, Camden  
Flexicore Div. of Comden Lime

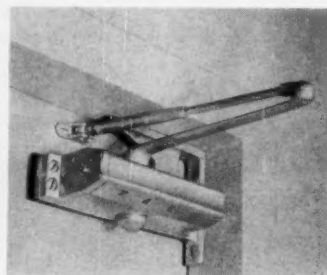
NEW YORK, Buffalo 6  
Anchor Concrete Products, Inc.  
NEW YORK, New York 17  
Flexicore Precast Inc.  
NORTH CAROLINA, Lilesville  
W. R. Bonsal Company, Inc.  
OHIO, Akron-Cleveland  
Lake Erie Flex., Kent, Ohio  
OHIO, Columbus 22  
Arrowcrete Corporation  
OHIO, Dayton 1, PO 825  
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Pittsburgh Flexicore Company  
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Durestone Flexicore Corp.

TEXAS, Houston, 4511 Kyle St.  
Flexicore of Texas, Inc.  
WEST VIRGINIA, Wheeling  
American-Marietta Company  
WISCONSIN, Beloit, PO 325  
Mid-States Concrete Products Co.  
CANADA—Richvale, Ontario  
Murray Associates, Limited  
CANADA—Montreal, Quebec  
Creighton & Archibald Ltd.  
CANADA, Woodstock, Ontario  
Schell Industries Ltd.  
CANADA, Supercrete Ltd.  
St. Boniface, Man.; Regina, Sask.  
PUERTO RICO, Hato Rey  
Flexicore Co. of Puerto Rico

## What's New . . .

### Compact, Attractive Unit for Efficient Door Closing

A new rack and pinion door closer designed with an adjustable compression spring is now available from Yale and Towne. Developed by the research division of that company, the new unit combines efficient door closing operation with attractive appearance and compact size.



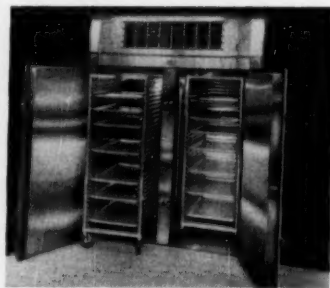
The new features make the closer particularly valuable on exterior doors where wind is a factor and on any door where drafts must be considered.

The new Yale 80 Line of door closers features an internal expansion chamber which absorbs extreme pressures and prevents leakage. A single valve screw provides easy two-speed control of the closing and latching action. The new closers are easily reversible for left or right hand doors by merely changing the position of the arm. The smooth textured metallic finishes give the closers an attractive appearance on schoolroom doors. **The Yale & Towne Mfg. Co., 11 S. Broadway, White Plains, N.Y.**

For more details circle #97 on mailing card.

### Cres-Cor Mobile Racks for Refrigerators

Mobile racks for use in reach-in or walk-in refrigerators and coolers are now available from Crescent Metal Products. Faster handling of salads, desserts and other special items, as well as better storage of dairy products, vegetables, meats and leftovers, is possible with the new Cres-Cor



Mobile Racks. Racks can be filled and wheeled into the refrigerators, ready to be wheeled out for quick serving. The racks thus provide transportation, storage and serving facilities in the one unit. Cres-Cor racks for refrigerators are available in heights of 30, 36, 42, 48, 58 and 70 inches. They are easily cleaned without disassembly. **Crescent Metal Products, Inc., 18901 St. Clair Ave., Cleveland 10, Ohio.**

For more details circle #98 on mailing card.

(Continued on page 136)



**HOW TO PREPARE MOP.** Pour FLOOR DRESSING over top of mop at rate of 1 to 1½ ounces for each 4" of mop.



Next, roll up mop and store in plastic bag or other airtight container for at least 4 hours. This allows FLOOR DRESSING time to become evenly distributed throughout mop.

## How to stop rubber marks

Do unsightly black rubber marks destroy the beauty of your floors?

Then you'll be delighted by the improvement when you begin using Multi-Clean FLOOR DRESSING.

A quick daily dust mopping with a mop treated with FLOOR DRESSING leaves a thin film that's highly resistant to marks by rubber or other materials.

**But that's not all!** Your wax or resin finish takes on new beauty. It has higher lustre, a harder surface. FLOOR DRESSING greatly improves anti-slip properties and extends wearing life of the wax.

And it *cleans* at the same time as it polishes and preserves. Since the treated mop picks up and holds free dust, there's no need for sweeping compound. You'll save hours of time and gallons of material.

FLOOR DRESSING has a pleasant aroma,

presents no fire hazard, and is listed by Underwriters' Laboratories as anti-slip. It also tends to discourage development of floor-dwelling bacteria and fungi.

**For all floors.** You can use Multi-Clean FLOOR DRESSING on all type floors, for it contains no ingredient that can harm any floor that's properly treated. It's available in 55, 30, 15, 5 and 1-gallon containers.

FLOOR DRESSING is just one of 27 modern cleaners, sealers, and finishes developed by Multi-Clean Research. For more information on this outstanding mop treatment and scientific MULTI-CLEAN METHOD for maintaining your floors, call your local Multi-Clean Distributor or mail coupon today. You'll be under no obligation.



# MULTI-CLEAN<sup>®</sup>

## Method

The combination of the right Multi-Clean Equipment and Materials with the correct procedure.

**MULTI-CLEAN PRODUCTS, INC., Dept. NS-38-28**  
St. Paul 16, Minnesota

Please send information on FLOOR DRESSING and scientific MULTI-CLEAN METHOD for maintaining following type floors:

- |  |                                      |  |
|--|--------------------------------------|--|
| <input type="checkbox"/> Asphalt Tile          | <input type="checkbox"/> Gym Floors  | <input type="checkbox"/> Terrazzo, Oxychloride |
| <input type="checkbox"/> Concrete              | <input type="checkbox"/> Rubber Tile | <input type="checkbox"/> Vinyl Tile            |
| <input type="checkbox"/> Other (specify) _____ |                                      |  |

Name \_\_\_\_\_ Title \_\_\_\_\_

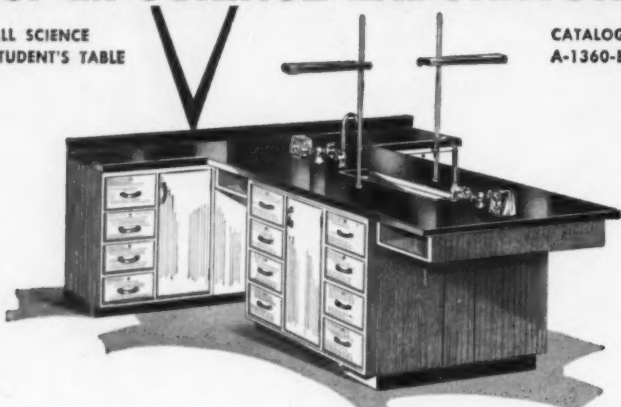
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# Quality / FURNITURE for all SCIENCE LABORATORIES

ALL SCIENCE  
STUDENT'S TABLE

CATALOG NO.  
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These new perimeter type tables offer unlimited design possibilities and arrangements from standard interchangeable base units. They provide numerous advantages for new construction design as well as for use in remodeling for Chemistry, Physics, Biology and General Science laboratories. Our representative engineer will be pleased to discuss your requirements and show you the entire line of Peterson furniture that has been the choice of leading educators and industrial furniture users for more than 65 years.

Write Dept. 1226 for Brochure Number 12. It's Free.

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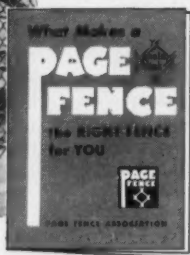
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Here's how to be sure  
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When you need a fence it will be much to your advantage to have full knowledge of the many choices of component parts that PAGE provides. You can choose from 8 heights—4 fabric metals—2 types of metal posts—6 styles of gates. All these and other features are pictured and described in the fold-

er offered above. It also supplies facts about the PAGE localized engineering and erecting service that assures highest grade workmanship and lasting satisfaction. Page Fence Association members, located in more than 100 cities, are listed in Folder DH-26. See that list for name of member nearest you.

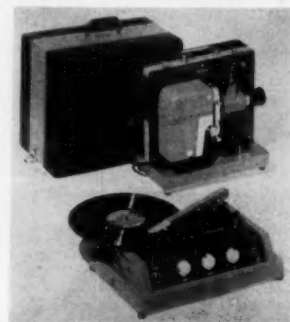
Write to PAGE FENCE ASSOCIATION in Monessen, Pa., Atlanta, Bridgeport, Chicago, Denver, Detroit, Houston, Los Angeles, New York, Philadelphia or San Francisco.

PRODUCT OF PAGE STEEL & WIRE DIVISION OF AMERICAN CHAIN & CABLE COMPANY, INC.

## What's New ...

### Sound Slide Projector for Large Audiences

Designed for use in auditoriums, gymnasiums and large classrooms, the new DuKane large-audience unit combines projec-



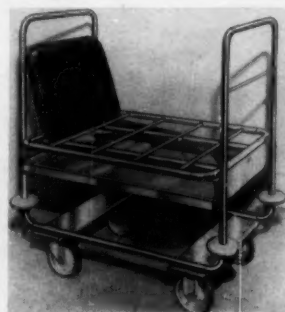
tor, record player and speaker. The projector is equipped with a 1000-watt lamp and can accept a 1200-watt lamp if desired. The DuKane "Silent Sound" system automatically advances the film in synchronization with the sound. A locking vise action keeps pictures in focus at all times. The film advance mechanism is designed to protect the film from scratches while a jet-stream cooling system keeps the film cool.

High-fidelity speakers are built into the carrying case for the record player which has a three-speed turntable and a microphone input. The entire combination is contained in two matched, compact carrying cases. DuKane Corporation, St. Charles, Ill.

For more details circle #99 on mailing card.

### Food Tray Dispenser Has Noise-Reducing Covering

Vinyl neoprene coverings on the tray rests help reduce noise with the new



Dispensator Model F16 for tray service. Redesigned with a streamlined appearance, the new tray cart carries trays on edge so that water will drain off before use. The easy-cleaning framework is also streamlined to accommodate the ball-bearing rotary bumpers which protect walls and doors from damage when the dispenser is moved to and from the cafeteria line or other place of use. Stainless steel is used for the easily removed and cleaned drip pan. W. H. Frick, Inc., 705 Citizens Bldg., Cleveland 14, Ohio.

For more details circle #100 on mailing card.

(Continued on page 138)



... assuring the finest for  
bright young futures



*Beverage-Air*

**MILK COOLERS**

Model SM 40-SS

**The Leading Choice Of Over 700 New York City Elementary And Parochial Schools**

More than ever—leading schools like the easy self-service for even the smallest children and the quick, push-around convenience of caster-mounted Beverage-Air Milk Coolers. Capacities are 672—½-pt. cartons, 560—¼-pt. cartons, 495—½-pt. bottles or 6—5-gal. cans. Stainless steel or baked enamel.



**SHALLOW or DEEP WELL COOLERS**  
Ideal for cafeteria line-ups, snack bars, etc.  
From small to large capacity models.

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**BEVERAGE-AIR**  
708 Third Street  
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**FACTORIES:** Punxsutawney, Pa., and Spartanburg, S. C.  
**WAREHOUSES:** Pittsburgh, Pa.; Trenton, N. J., and Memphis, Tenn.

**Cut Maintenance \$600**  
yearly per unit with

**WORLD**  
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**Dryers**

*Best By Test!*

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**THOUGHTFUL BUYERS  
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Each high speed WORLD Hand Dryer can save up to \$600 per year on paper and maintenance . . . dry hands fast as towels . . . keep wash-room clean and sanitary.

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Gentlemen: Without obligation send me copies of letters from users, also folder of facts including cost-saving figures and full details on your FREE-TRIAL offer.

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**MAIL  
THIS  
COUPON  
NOW!**

# IN CONVENTION ASSEMBLED

*Read the Interpretative Account of*  
**THE FIRST 1958 A. A. S. A.  
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*in the*

**MARCH ISSUE OF**

# THE NATION'S SCHOOLS

919 N. MICHIGAN AVE.

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## What's New ...



### STOP Disturbing Sounds



Where  
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Start—

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HARDWOOD  
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SOUND INSULAT-  
ING DOORS



Isolate disturbing noise and sound in music and band rooms, gymnasiums, workshops and hallways with this nationally famous sound insulating door. Pre-measured for sound reduction, you know in advance the final noise factor. Sound Insulating Doors come in 35, 40 and 43 decibel degrees of transmission loss — controlling a full range of sound intensity. Write for details or consult your architect or acoustical engineer.



Get this FREE brochure

It tells in under-standable non-technical language how SOUND INSULATING DOORS function — how sound intensity is measured and controlled.

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### Adjustable Posture Chair for Classroom or Laboratory

Correct posture, important for sustained interest and concentration, is now provided in adjustable chairs for commercial class-



rooms and laboratories. The Toledo 9610 student posture chair has all-steel base construction strongly built and braced for constant, rugged daily use without maintenance. The full, roomy, scroll-shaped birch plywood seat and backrest are each instantly adjustable to the individual needs of the student, whatever his height. Adjustment is made safely and quietly to ensure comfortable seating with good posture. Chairs are equipped with either floor-protecting swivel feet or two-inch hard rubber ball bearing casters. The Toledo Metal Furniture Co., 1100 S. Hastings St., Toledo 7, Ohio.  
For more details circle #101 on mailing card.

### Prefabricated Covers for Between-Building Walkways

Low-cost, all-steel units are now available as protection to pupils and other pedestrians between buildings or sections of buildings. Consisting of standardized units manufactured with production line economies, the prefabricated covers are

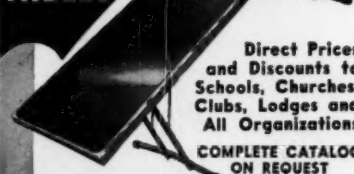


quickly assembled and erected by workmen without specialized skills. Substantial savings in cost are promised with the architecturally-designed units.

Available in widths of 4, 6, 8 and 10 feet, the walkway covers can be installed in whatever length is required. A designed-in gutter in the fascia running lengthwise of the walkway cover drains the box-V style roof sheets. Engineered for permanent installation, the covers are easily moved and re-installed and require practically no maintenance. Childers Mfg. Co., 3620 W. 11th St., Houston 8, Texas.  
For more details circle #102 on mailing card.

(Continued on page 140)

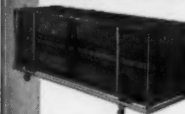
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Direct Prices  
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### TRUCKS FOR FOLDING TABLES



Monroe TS (transport - storage) Trucks make handling and storing of Folding Tables easy and quick. Combination offers.

### STEEL FOLDING CHAIRS



Monroe Steel Folding Chairs in attractive range of styles, sizes and prices. Excel in comfort, easy handling and durability. Also full line of non-folding chairs, desks and combinations for classroom, cafeteria and church school use.

### PORTABLE PARTITIONS



Monroe's new movable partitions change idle space into useful areas. Smooth Masonite panels, tubular steel frames. Swivel pedestals, casters or glides.

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### FOR YOUR CLASSROOM

THE EASY  
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### SENSATIONAL NEW Movie-Mite Supreme

- Theater Quality 16mm Sound Projector
- Film Safety Trips
- Easiest to Use
- Lowest in Cost
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- 50,000 Users Can't Be Wrong
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SAVE  
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### THE EDUCATOR'S FRIEND

Here's a professional projector for your educational and entertainment films. Precision built with rugged construction throughout. Weighs only 27½ lbs.

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**"National Accounting machines save us \$116,400 a year...  
return 90% on our investment!" —MORRISON-KNUDSEN COMPANY, INC., Boise, Idaho**

"Our heavy construction and engineering business is international in scope, employing more than 40,000 people. We have placed 32 National Accounting machines on field construction projects, and in our home office and branch offices.

"The machines are used for accounts payable, payrolls, processing earnings records, preparing Federal and State reports, writing W-2's, and posting detail cost ledgers.


"The flexibility of these Nationals permits switching quickly from one job to another, thus increasing the utility of these machines. We also appreciate their rugged construc-

tion and the minimum of service required, as most of our jobs are located in isolated areas many hours from National Service offices. And the simple operation and programming of these machines is advantageous in training personnel quickly to use these machines on relatively short-term field jobs.

"We estimate that these National Accounting machines save us \$116,400 a year, a 90% annual return on our investment."

*Tom Joiner*

Controller, Morrison-Knudsen Co., Inc., Boise, Idaho

In your business, too, National machines will pay for themselves with the money they save, then continue savings as annual profit. Your nearby National man will gladly show how much you can save—and why your operators will be happier. He's listed in the yellow pages of your phone book. 

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ACCOUNTING MACHINES  
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NCR PAPER (NO CARBON REQUIRED)

**THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO**  
989 OFFICES IN 94 COUNTRIES



## What's New ...

### Eight-Pupil Bus for Rural Districts

Rural school districts may well use the



new Dodge Town-Wagon for picking up children living on narrow or secondary roads. It is also adaptable for use in transporting special small groups, handicapped pupils, equipment and supplies and for other purposes where the large school bus is not required. It can haul cargo or pupils and the seats can be arranged to accommodate up to eight pupils or other persons.

The Town-Wagon models are designed with maximum safety features. These include full-traction differential for front and rear axles, electric windshield wipers which operate at constant speed under any engine load, moisture-proof ignition system, and twin headlights for driving at night or under unfavorable weather conditions. The durable seats are solidly anchored to the floor and the Town-Wagon provides easy exit from both front and rear. **Dodge Division of Chrysler Motors, 7900 Joseph Campau Ave., Detroit 11, Mich.**

For more details circle #103 on mailing card.

### Custom Minaboard Is High Density Acoustic

Negligible air filtration is permitted in the new high density acoustical ceiling material known as Armstrong Custom Minaboard. Dirt and dust do not collect on the interior surface since virtually no air passes through the new board. The perforated material has good sound absorption properties and, because of its high density, also offers excellent resistance to sound transmission. Custom Minaboard is a combination of mineral fiber with special binders to produce a rigid panel with exceptional strength. It is completely fire-safe, can be cleaned with a vacuum cleaner or damp cloth, and may be repainted without appreciable loss of acoustical efficiency. **Armstrong Cork Co., Lancaster, Pa.**

For more details circle #104 on mailing card.

### Food Waste Disposer Works at High Speed

The Colerain Red Goat Food Waste Disposer is a heavy duty unit with a high-speed disintegrating action for all types of food waste. It is constructed to meet all sanitation and plumbing codes. Easy to install, the Red Goat has a large opening for easy feeding, rugged cast-iron and alloy-steel construction, synchronized automatic motor and water controls and a new disintegrating principle. It is designed for heavy-duty institutional and com-

mercial use and is automatic in operation. **The Colerain Metal Products Co., 2021 Eastern Ave., Cincinnati 2, Ohio.**

For more details circle #105 on mailing card.

### Glass Trophy Case Occupies Minimum Floor Area

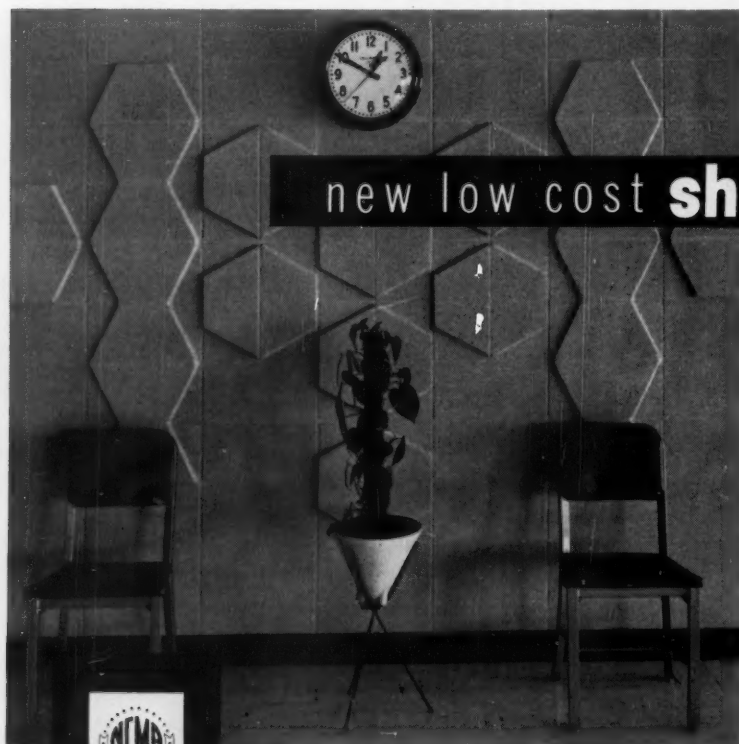
Requiring only 3 7/16 square feet of floor space, the new Waddell glass trophy display case has six 12-inch adjustable shelves, providing maximum display space.



The No-Nick, bulb-edge glass shelves can be placed as required to accommodate extra large trophies as well as smaller ones. The hardwood frame has natural finish and the sliding glass doors have built-in locks. **Waddell Company, Inc., Greenfield, Ohio.**

For more details circle #106 on mailing card.

(Continued on page 142)



new low cost **shadowal** block

Build class into  
your classrooms

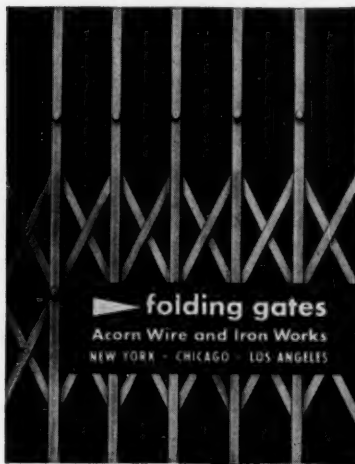
**Shadowal**—the block with 1000 faces—available now, to give your new school distinctive wall surfaces alive with beauty. **Shadowal** block is sound absorbing and fire safe—needs no expensive wall covering and rarely requires maintenance.

**BOND ISSUE PENDING?** **Shadowal** block is a most economical way to a "yes" vote—most beautiful, too. Contact your local NCMA member for complete information today.

*Bas-relief of shadowal block creates new dimension in classroom walls—allows patterns to be varied from room to room.*



NATIONAL CONCRETE MASONRY ASSOCIATION • 38 SOUTH DEARBORN • CHICAGO



**folding gates**  
Acorn Wire and Iron Works  
NEW YORK • CHICAGO • LOS ANGELES

**GATES  
PARTITIONS**

**for  
Schools**

SINCE 1913

**wire mesh partitions**  
Acorn Wire and Iron Works  
NEW YORK • CHICAGO • LOS ANGELES

## Acorn Wire and Iron Works

4940 S. Kilbourn Avenue • Chicago 32 • LUdlow 5-0600  
 NEW YORK      LOS ANGELES  
 101 Park Avenue      1709 W. Eighth Street  
 MUrray Hill 9-7370      DUmkirk 9-4747

### All-purpose liquid detergent

**Mop it on...**



**Walk  
away**



# Cindet

**Let Cindet suds lift the dirt for you**

CINET does more cleaning with less effort and less material; works in hard or soft water.

CINET outstrips them all as a wax stripper. Cleans walls, woodwork, tile, porcelain, glass, metal.

CINET does a cleaner job—cuts labor costs: Mop it on, walk away, come back and pick it up.

CINET does the job with no drag because dirt particles chatter, lift and ride high.

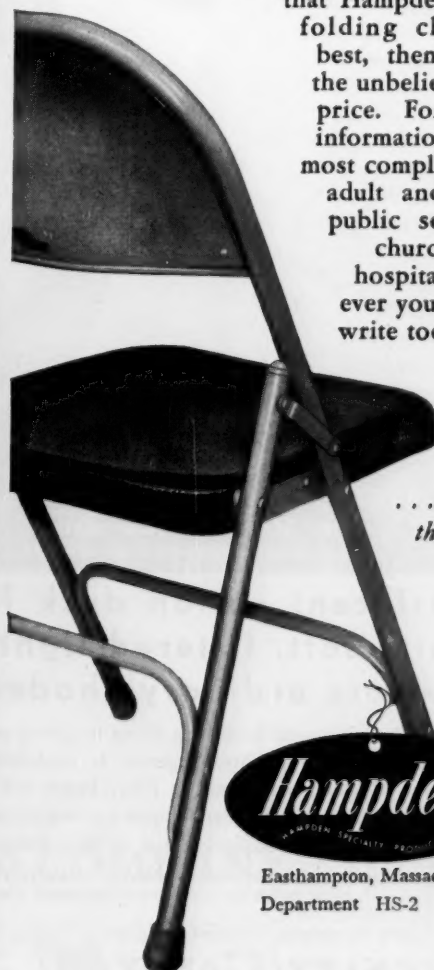
For free sanitary survey of your premises ask your Dolge service man



**"unaccustomed  
as  
YOU  
are  
to  
PUBLIC  
SEATING"**



Be sure to compare comfort, style and quality! After you've seen for yourself that Hampden all-steel folding chairs are best, then compare the unbelievably low price. For detailed information on the most complete line of adult and juvenile public seating for church, school, hospital — whatever your needs — write today direct.



*... get all  
the facts!*

**Hampden**

Easthampton, Massachusetts  
Department HS-2

Distributors throughout the United States

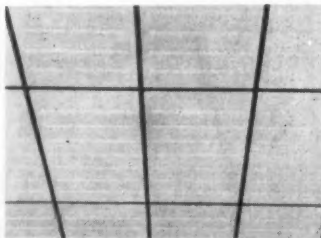
## What's New ...

### Two Translucent Ceiling Panels in Acousti-Lux Line

Septaline (illustrated) and Southland are the names given to the two new designs in translucent ceiling panels introduced by Celotex. The light-diffusing panels in the Acousti-Lux line are designed for use in conjunction with a suspended ceiling system and a fluorescent light source. Both designs are available in 24 by 24 and 24 by 48-inch sizes to provide comfortable, glare-free lighting for school installations.

The new Acousti-Lux panels consist of two sections of molded vinyl, separated by an air space for sound absorption and uniform translucence across the ceiling surface. Units are installed in combination

with sound-conditioning tile or in an overall translucent ceiling design as shown in



the illustration. The Celotex Corp., 120 S. La Salle St., Chicago 3.

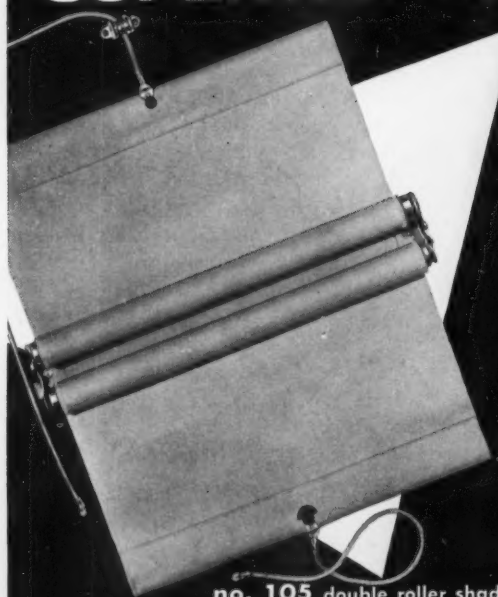
For more details circle #107 on mailing card.

### Automatic Gas Water Heater Has Copper-Nickel Alloy Tank

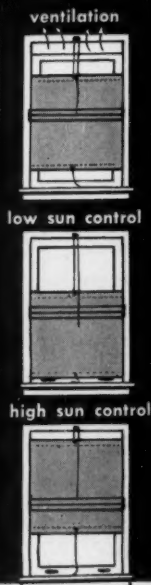
The Copper Nickel Sanimaster is a new automatic gas water heater for institutional use. The copper-nickel alloy tank is engineered to provide rust-free hot water and assure long appliance life. The Model CST 80-80, designed for use with natural, mixed, manufactured and LP gases, can be installed singly or in multiples for single or two-temperature operation. It is approved by the AGA Laboratories as an automatic storage water heater and as a circulating tank water heater. Ruud Mfg. Co., Kalamazoo, Mich.

For more details circle #108 on mailing card.

## classroom light always under control with BECKLEY • CARDY SUPERTEX SHADES



no. 105 double roller shades  
adjustable to movement of sunlight.



## translucent cotton duck fabric admits soft, filtered light... outwears ordinary shades 3 to 1

Supertex fabric is woven from long fibres to give a uniform texture and unusual wearing quality. Supertex is washable, sunfast and waterproof. Contains no sizing or filler, hence will not crack or dry out. No. 105 patented roller fixtures are engineered mechanisms

— smooth functioning and quickly demountable.

ALSO Supertex non-demountable and single roller shades. For room darkening — Supertex light-proof shades.



write for complete literature and prices

**BECKLEY/CARDY**

1912 no. narragansett ave. • chicago 39, ill.

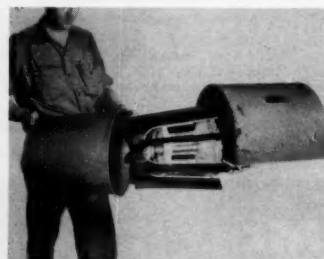


supplying the  
nation's schools  
for over 50 years

### Cleaning Time Saved With Wastebasket Scrubber

A motordriven machine is now available for scrubbing wastebaskets. Hours of cleaning time can be saved by using the new machine while life of wastebaskets is prolonged. The unit is designed for mounting on a bench top at waist height. Baskets are simply placed over a rotating brush which thoroughly cleans them and scrubs out gummy substances, ashes and sticky residue.

The brush is composed of eight nylon brush strips which rotate at the rate of



200 revolutions per hour. Brush strips can be made to suit the size of all circular wastebaskets and each brush is engineered to the user's needs. The Fuller Brush Co., Machine Div., Hartford 15, Conn.

For more details circle #109 on mailing card.

### Powerful Vacuum Sweeper for Gymnasiums and Lots

School parking lots, play areas, gymnasiums and sidewalks can be easily kept clean with the new 32-inch walk-behind sweeper. The high powered vacuum system picks up all dirt, leaving a minimum of dust. The 11-inch high speed fan sucks light dirt and dust into the large fabric bag. Heavy litter picked up by the main brush is thrown into a removable hopper. The self-propelled machine is highly maneuverable, will pass through standard school doorways, and cleans a 32-inch path. Control, and a safety stop release, are within easy reach of the operator. The "floating" main brush follows contours and has a pressure adjustment for heavily soiled areas. The machine can be changed into a floor maintenance unit for light buffing and polishing. G. H. Tennant Co., 721 N. Lilac Drive, Minneapolis 22, Minn.

For more details circle #110 on mailing card.

(Continued on page 144)



# THE NISSEN TRAMPOLINE\*

## IS AN EXCELLENT INVESTMENT

### An Investment in Good Physical Training

The Trampoline is an excellent conditioner for boys and girls. It develops muscular control, visual coordination, posture and grace. It's easy to learn, simple to teach. But one of the more important advantages of the Trampoline is that it is fun. And because it's fun, boys and girls take more interest, work harder, derive more good from the exercise.

### An Investment in Quality Equipment

Nissen Trampolines are built to last and last. Quality materials, scientific design and careful workmanship give you an equipment that will stand up under years of constant use. They're safe to use. The frame is welded steel heavily padded. The all nylon bed won't sag or give way. It's easy to set up and rolls away for small space storage.



### IS THE TRAMPOLINE A PART OF YOUR SCHOOL'S PHYSICAL EDUCATION PROGRAM?

If not, talk to your physical education instructors. Nissen Trampolines are regulation equipment in inter-collegiate and national gymnastic competitions. And more and more high schools, elementary schools and colleges are using the Trampoline with great success.

*If you'd like more information, just send a card to the address below. Complete facts on instruction, construction, sizes and prices will be sent to you.*

\*IF IT ISN'T A

**NISSEN**

IT ISN'T A TRAMPOLINE®

®Reg. U.S. Pat. Office

## NISSEN TRAMPOLINE COMPANY

200 A Avenue N.W., Cedar Rapids, Iowa, U.S.A.

NISSEN TRAMPOLINE COMPANY, LTD.  
Hainault Works, Chadwell Heath, Romford, Essex, England

NISSEN TRAMPOLINE OF CANADA, LTD.  
8 Colborne St., Toronto 1, Ontario

## What's New ...

### THAT NEW PRANG® DRAWING PENCIL BEATS ANYTHING I'VE EVER SEEN!



*try 'em!  
-on us!*



Prang, a name long recognized in the world of art adds a new series of quality art pencils to their colorful line. They were developed with a thorough understanding of requirements needed in teaching and art education.

Available in five selected grades—Outline Drawing, Deep Shade, Rendering, Drawing and Sketching; they give a complete range for all basic art activities.

Like all Prang Products, they have been completely tested for their versatility, durability, and performance. Only those products that perform carry the name Prang!

Write for a free sample kit on your school letterhead. Dept. NS-63

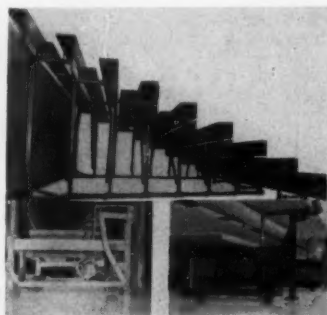
**THE AMERICAN  
CRAYON COMPANY**  
SANDUSKY, OHIO NEW YORK

**Only Prang makes  
Prang Quality!**

### Increased Holding Action for Gymstand Brakes

A new brake system with 400 per cent increased holding action against unwanted forward or backward movement is a feature of the new Wayne rolling gymstands. This safety design feature utilizes eight brakes which are located under the front row. When the front row riser board is swung forward and upward to open the gymstand, the system raises the eight brakes so that the stand can be pulled forward or returned to the closed position. When the front row riser is lowered, the eight brakes contact the floor securely, anchoring the gymstand against movement.

Safety features built into other new Wayne gymstand models include a rolling frame foot assembly with retractable wheels, permitting the entire bottom of the bleacher frame to rest on the floor when the bleachers are occupied, holding them firmly in place. When weight is



removed, the retracting wheels return to their original position, raising the frame for easy closing. Another feature of all current Wayne rolling gymstand models is a new wood surfacing process which completely smooths surfaces all sides of every piece of wood to exact dimensions, ready for the high quality finishing lacquer. Wayne Iron Works, 147 N. Pembroke Ave., Wayne, Pa.

For more details circle #111 on mailing card.

### UL Tested Doors and Frames in Various Models

Various models in both single and double steel doors to fit a number of sizes of openings are now available with the Underwriters Label. The steel doors and frames passed the tests to meet requirements for 1½ hour B label service.

The new door line features 16 gauge steel tubular rails and stiles, mitred door corners with reinforced continuous face welded joints and identical appearance on both sides. The doors are insulated with high heat-absorbing materials which also act as sound deadeners. They are of all welded construction for strength and rigidity. The doors are bonderized and finished with a baked-on enamel prime coat. The Steelcraft Mfg. Co., 9017 Blue Ash Rd., Cincinnati 42, Ohio.

For more details circle #112 on mailing card.  
(Continued on page 148)

Designed in Cooperation with  
Recognized Authorities on  
Play Guidance and  
Physical Education



**Game-time**  
UNCONDITIONALLY WARRANTED

**PLAYGROUND  
SCHOOL • PARK • POOL  
EQUIPMENT**

Easier to Install — Stronger — Safer

Planning and layout service.

WRITE FOR CATALOG



**Game-time, inc.**

208 Jonesville Road  
Litchfield, Michigan

Wholly owned subsidiary of Simpson Mfg. Co.

### BRONZE MEMORIALS

DONOR  
PLATES

HONOR  
ROLLS

TABLETS



### LIGHTING FIXTURES



BRONZE

• ALUMINUM

• WROUGHT  
IRON

• STAINLESS  
STEEL

### ARCHITECTURAL

LETTERS in BRONZE  
ALUMINUM • NICKEL-SILVER

Illustrated Catalogs & Estimates  
sent on request.



**MEIERJOHAN-WENGLER**

1102 W. 9th St. CINCINNATI 3, OHIO



## ... WITH THE MOST COMPLETE SCHOOL ACCOUNTING PLAN

Of course, nobody really punishes an administrator with blackboard assignments.

Nevertheless, he'll save himself a lot of financial headaches with the new Burroughs school accounting plan which incorporates the unparalleled speed and flexibility of Burroughs numerical or typing Sensimatic. And, as ever more students pour into our schools year after year, the need for complete, accurate, instantly available financial data becomes increasingly obvious.

The new Burroughs plan brings complete mechanization of descriptive accounting to school systems. Look at these benefits: Greater productivity with less effort. Improved

accuracy. Smoother work flow. Split-second availability of all the figure-facts you want when you want them.

Even a newly trained operator can race through revenue accounting, budgetary accounting, check writing, payroll, student activity accounting. She can switch from job to job at the flick of a knob.

There's a free booklet about this work- and time-saving plan. You can get your copy by calling our nearby branch office. Or write to Burroughs Division, Burroughs Corporation, Detroit 32, Michigan.



## BURROUGHS Sensimatic Accounting Machines

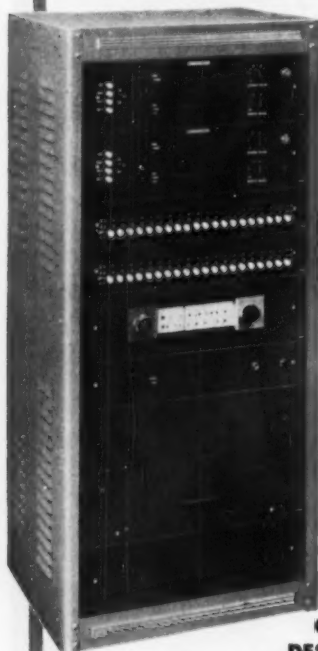
Burroughs and Sensimatic are trademarks.



## LATEST "SPACE-SAVER" DESIGN CENTRAL CONTROL, ALL-FACILITY SCHOOL SOUND SYSTEM

by

**Rauland**



**MODEL 5314**  
ULTRA-COMPACT  
FOR USE IN MINI-  
MUM SPACE—FOR  
UP TO A TOTAL OF  
40 CLASSROOMS



### OFFERS EVERY DESIRABLE FACILITY

Here, at minimum cost and occupying very little more space than a file cabinet, is an invaluable aid for effective administrative control and a remarkable facility for instruction. Includes every modern feature and program facility:

- ★ Provides FM or AM radio programs for distribution to any or all rooms
- ★ Distributes phono program (4-Speed Automatic Changer)
- ★ Selects and distributes any of 2 Microphone, Radio or Phonograph programs
- ★ Provides 2-way conversation with any room. Distributes any 2 programs simultaneously (or one program plus intercom)
- ★ Has Emergency (All-Call) Feature

Write for full details covering the low-cost RAULAND "Space-Saver" School Sound System.

**Rauland**

Pioneers in  
School Sound

Other RAULAND Systems are available with capacity up to 160 classrooms. RAULAND Public Address equipment is also available for auditorium and athletic field sound coverage.

WRITE FOR FULL DETAILS

### RAULAND-BORG CORPORATION

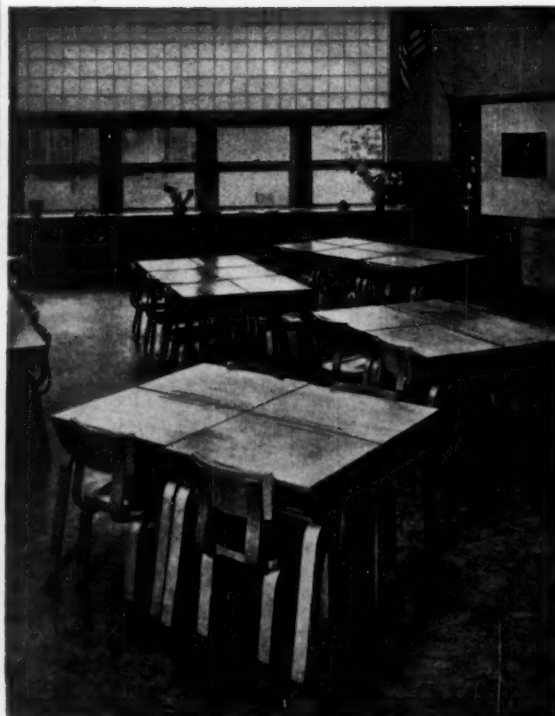
Rauland-Borg Corporation  
3515 Addison St., Dept. N, Chicago 18, Ill.  
☐ Send full details on all RAULAND School Sound Systems.  
We have \_\_\_\_\_ classrooms.

Name \_\_\_\_\_ Title \_\_\_\_\_

School \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



Stockton School, East Orange, N. J.,  
showing Thonet 1216 chairs and 801 desks.

### UNEXCELLED

*for simplicity,  
comfort  
and strength*



127 years  
makers of  
chairs and  
tables for  
public use.

6340 tablet arm chair  
seat: 17 x 17"  
tablet: 12 x 23"

Write us about your seating  
needs. We will send  
appropriate illustrated material.

**THONET INDUSTRIES, INC., Dept. G**  
ONE PARK AVENUE, NEW YORK 16, N. Y.



SHOWROOMS: NEW YORK, CHICAGO, DALLAS, LOS ANGELES,  
MIAMI, STATESVILLE, N. C.

*new!*  
*everything*  
*about*



**UADRALINE**  
A Complete New Line of Educational Seating!  
American Desk Mfg. Co., Temple, Texas

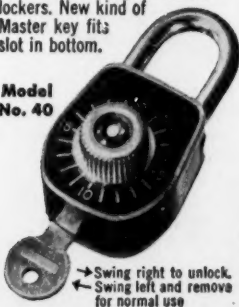
**THE LOCK WITH THE CLICK THAT COUNTS**

**NEW GOUGLER KEYLESS COMBINATION LOCK**

**New Master Key Model**

Here is new Gougler lock you should have for your school lockers. New kind of Master key fits slot in bottom.

Model No. 40



- NEW CONVENIENCE
- NEW SECURITY
- NEW SIMPLICITY
- MOST DURABLE
- FINEST LOCK FOR SCHOOLS



There are no projections or extra bulk to this new lock. It is trim, modern, rugged. Die cast case. Parts impervious to moisture.

Commercial key machines can not duplicate new Master Key.



This is our regular Gougler Red Dot lock. Like all Gougler locks, you can open it without looking, even in the dark. Just count the clicks.

Write for free sample lock No. 40 and factory prices  
**C. L. GOUGLER KEYLESS LOCK CO.**  
705-769 Lake St., Dept. 4 Kent, Ohio



**TEACH**  
with the tools  
they'll use in industry

ROCKWELL-BUILT

**DELTA**  
**POWER TOOLS**

SAFE, PRACTICAL and  
ECONOMICAL—DELTA IS THE  
WORLD'S MOST COMPLETE  
LINE OF WOODWORKING  
AND METALWORKING  
POWER TOOLS

Rockwell Manufacturing Company  
Delta Power Tool Division

406D N. Lexington Ave., Pittsburgh 8, Pa.

DELTA POWER TOOLS

another fine product by

**ROCKWELL**



## What's New ...

### Log Cabin Syrup in Institutional Pack

The well-known blend of sugar and maple syrups known as Log Cabin Syrup, is now available packed for quantity service. One gallon cans, four to a case, are now offered food service departments. Distribution is through warehouses located throughout the United States. Log Cabin Syrup, in addition to its use on hot cakes, waffles and French toast, is also suggested as a pour-on for biscuits and as an ice cream topping. It can also be used to baste and glaze meats, as a vegetable glaze and to sweeten fruit. General Foods, White Plains, N.Y.

For more details circle #113 on mailing card.



### Combination Board for Office and Faculty

The Duet is a combination chalkboard and bulletin board unit which is especially

adaptable for use in offices, teachers' rooms and corridors where bulletins and notices are posted. The chalk board section is available in blue, mauve brown, spruce green, sage green or coral with the bulletin board in tan or gray cork. The unit has an extruded aluminum frame and chalk tray and is ready for easy installation on any wall. It is relatively inexpensive. Son-Nel Products Co., 900-19th Ave., Oakland 6, Calif.

For more details circle #114 on mailing card.

### Food Waste Disposer for Heavy Duty Use

Model "150" Food Waste Disposer is designed and built for heavy duty use. It may be fed from the soiled dish tables, thus saving time and eliminating extra handling and storage of garbage in cans. The disposer has a fast-action shredding chamber, consumes wastes rapidly and may be fed continuously. The flushing action of water keeps the interior clean and free of odor.

The 1½ H.P. motor, fully protected by built-in overload switch with reset button, has permanently lubricated bearings and is completely sealed against damage by water or steam. The Model "150" is available with 15, 18 or 20-inch cones for mounting in dish tables. Each unit comes complete with cone, cover, rubber scrapping block and silver saver. Toledo Scale Co., 1023 Telegraph Rd., Toledo 12, Ohio.

For more details circle #115 on mailing card.



#### SUPER MODEL BP-2

Wet and dry pick-up and blowing. Internal filter. Capacity 1½ bu.



#### SUPER MODEL RS-1

Really rugged — wet and dry pick-up and blowing. Filter bag carried on transport handle. Capacity 1½ bu.

Motor, fan and filter assembly readily removed and mounted on 55 gal. steel drum. Special adaptor covers available at small cost.



#### SUPER FLOOR MACHINE

For all floor surfaces. 4 sizes.

# SUPER

## Is The Word

FOR THE NEWEST  
IN SUCTION CLEANING

Not even the new cars have more unique, advanced features than the 1958 Super suction cleaners. Here is faster, better, easier cleaning at lower labor and upkeep cost.

• Our own make custom built motor maintains continuous full rated HP on the job • Coolest running in the industry • Bigger measure of corrosion, rust and wear protection in every part • Self cleaning filter • Exclusive Super assembly of container and base eliminates bolt holes in container • Wrap around rubber bumper • Push button hose connection • Center float control for wet pick-up, positive, mechanical—will not stick • Internal baffle precipitates dust, keeps filter clean, prevents excessive sudsing in wet pick-up.

See, try, the quiet, rugged Supers before you buy—8 models meeting every budget and job requirement. There is a Super dealer near you. Write for catalog.

"Once Over Does It"

## SUPER SUCTION SERVICE®

Power Suction Cleaners • Quality Floor Machines

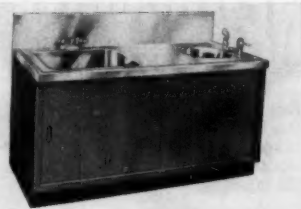
"THE DRAFT HORSE OF BUILDING MAINTENANCE MACHINES"



THE NATIONAL SUPER SERVICE COMPANY

1956 N. 13th St. • Toledo 2, Ohio

### Modular, Mobile Units in 1958 Grade-Aid Line



Mobile classroom units of steel construction included in the 1958 line of Grade-Aid School Equipment are sink units, wall cabinets, counter units, wardrobes and mobile supplementary classroom equipment. These include clay, toy, book and utility carts. The modular design and mobility of the line permits maximum utilization of classroom space and the possibility of quick rearrangement of units to meet changing requirements. The units can be moved with ease anywhere in the classroom. The new No. 1005 Sink Unit illustrated has a stainless steel bowl. It is available with special Melamine plastic or stainless steel top.

Grade-Aid classroom units are available in four heights to fit all grade needs. Interchangeable sliding doors on cabinets and wardrobes are available in gray, coral, yellow or blue to match or harmonize with any color scheme. School Equipment Mfg. Corp., 46 Bridge St., Nashua, N.H.

For more details circle #116 on mailing card.

(Continued on page 150)





## Readin'-Ritin'-Rompin'



Griggs *Tempo* Table No. 980  
and Chair No. 940

### GRIGGS Furniture Stands Up

Sometimes (usually on a rainy day) our teacher lets us play indoors. Our teacher says that our GRIGGS chairs and desks are built to last and last and stay looking like new even if we do bump them around once in a while. (We like the GRIGGS happy colors, too!)

The chairs are the New GRIGGS Tempo No. 940. The sturdy, handsome study table with roomy book compartments is Tempo table No. 980. This table comes in three sizes with from two to six book compartments.

Ask your GRIGGS Distributor for quotations. Write to GRIGGS for your complete Tempo catalog.

**GRIGGS**

**EQUIPMENT, INC.**  
BELTON, TEXAS



## Performance-Proven . . . FOR LONGER LIFE AND LOWER COST-PER-USE!

Longer service and reduced cost are yours with McArthur's performance-proven Super-Gym and Super-Turk School Towels. Woven of the best long staple, triple-twisted, two-ply warp yarns . . . with heavy woven tape selvage edges . . . full 20" x 40" shrunk size. The extra strength without extra weight means reduced laundry costs; and McArthur has an economical School Towel Plan and free towel repair service. Choose McArthur Towels . . . for longer wear and lower cost-per-use!

**GEO. McARTHUR & SONS, INC.**  
BARABOO, WIS.

NEW YORK STATE REPRESENTATIVE: Vern Volland, 19 Fairchild Drive, Eggertsville 21, N.Y.

## Best Buy in FLAGS for SCHOOLS

**BULLDOG**—most famous name in cotton bunting flags—U.S., State and School flags for outdoors. Rugged, reinforced with nylon thread.

**STATE FLAGS**—of complicated design now available in new Detco Process. Accurate and authentic in design and color. Very economical.

**GLORY-GLOSS**—U.S., School and State Flags for indoors and parades. Beautiful, lustrous and economical.

Ask about Dettra's movie "Our U.S. Flag"—The Freedom Foundation Award winning 16 mm color sound film . . . the ideal way to tell the story of our Flag.

For complete information call your local Dettra Dealer or write direct to—Dept. N.

**Dettra Flag Co., Inc.**  
OAKS, PENNSYLVANIA

Flagmaker to the Nation for more than 50 years



## What's New . . .

### Floor Finish Removed Without Scraping

Time and labor are saved in removing paint, varnish, lacquer, seal and oxidized oil from floors and walls with the new Myco Paint and Varnish Remover. The surface coating is loosened from concrete, wood and terrazzo floor surfaces, as well as walls, doors, partitions and woodwork, when the remover is applied. It is easily washed off with water, leaving a clean surface, free of residue and dirt. Myco is non-flammable, has a low degree of toxicity and is available in five-gallon containers. Masury-Young Co., 76 Roland St., Boston 29, Mass.

For more details circle #117 on mailing card.

### Quiet Power Mop Cleans Without Disturbing

The new model 200 Krako Power Mop is designed for dry cleaning floors and



other areas without disturbing pupils or teachers. The lightweight model operates with minimum power noise, making it possible to clean certain areas while classes are in session, without disturbance. It is easy to carry and has straps balanced to distribute the weight for minimum operator fatigue. Krako Division of Toledo, 3128 Bellevue Rd., Toledo 6, Ohio.

For more details circle #118 on mailing card.

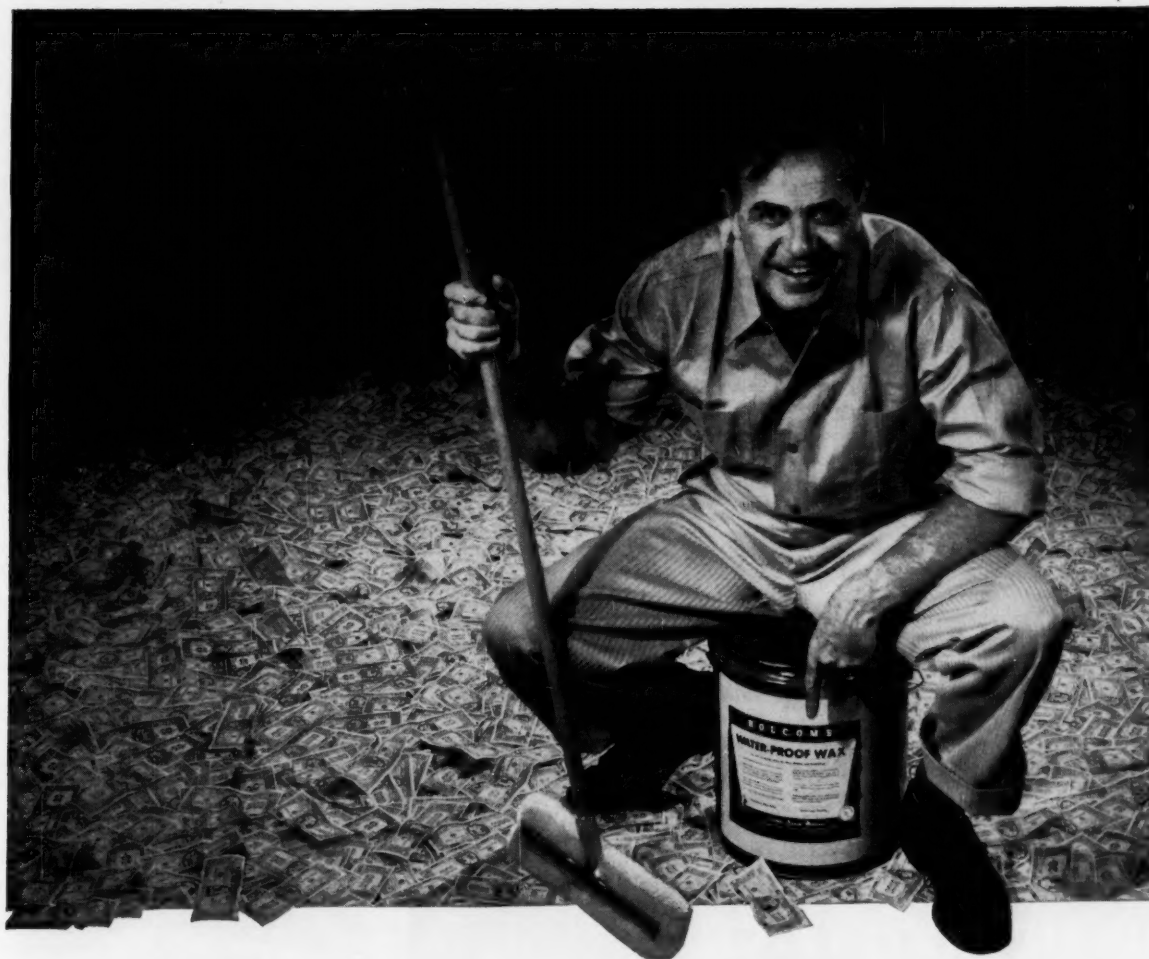
### Correct Seating Determined by Meter

The Seat-O-Meter is a unique measuring device developed to determine correct seating adjustments. Calibration of all parts of the human body contacted in a seated position makes possible the correct adjustments as to height and depth of seat, required position and relaxation of arm and elbow to working plane, correct position of lumbar peak and required tension for back-support. The correct amount of support for the feet is also determined.

Approved by the Correct Seating Institute, the Seat-O-Meter is made in several sizes and styles suitable for all seating needs. Permanent Tubegraphs of the measurements for each pupil or teacher can be retained for reference. Standard Foundry Products, 412 Laurel St., Reading, Pa.

For more details circle #119 on mailing card.

(Continued on page 152)



## **"This stuff makes our floors look like a million bucks!"**

Not only that, Holcomb customers say WATER-PROOF WAX saves them plenty of bucks, too.

Holcomb WATER-PROOF lasts 2 to 5 times as long as ordinary waxes. Even if it lasted only twice as long, figure it this way:

Most companies pay for about 110 man-hours of work (sweeping, mopping, scrubbing, waxing, buffing) per drum of wax used. Say you ordinarily used four drums of wax a year—with WATER-PROOF you'll need only two. That saves 220 man-hours, or, at a reasonable hourly rate, somewhere between \$350 and \$500 per year on waxing labor costs alone!

And since you only wax half as often with WATER-PROOF, you'll cut wax consumption in half. Actually, you'll *make* money . . . for you're saving more per year than you'd spend on WATER-PROOF. To cut your maintenance costs, ask your Holcombman about Holcomb WATER-PROOF WAX.

**HOLCOMB  
SCIENTIFIC CLEANING  
MATERIALS**



J. I. HOLCOMB MFG. CO., INC. • 1601 BARTH AVENUE • INDIANAPOLIS, INDIANA  
Hackensack • Dallas • Los Angeles • Toronto



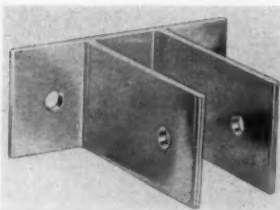
## What's New ...

### Ultraviolet Lamp Provides Bacteria Barrier

Designed for insertion in heating and air conditioning ducts in schools and other institutions, the new Westinghouse Sterilamp G10T5-½ produces high radiation effective in killing bacteria, viruses and molds. The new ultraviolet lamp is highly efficient and tests indicate that 80 per cent of air borne virus and bacteria are destroyed when a single ultraviolet lamp is installed in a duct. As air is recirculated in the ducts, more bacteria are destroyed on exposure to the Sterilamp tube, reducing infection in the air to a minimum. Westinghouse Electric Corp., Box 2278, Pittsburgh, Pa.

For more details circle #120 on mailing card.

### Toilet Compartment Bracket Has Permanent Finish



Polished and anodized extruded aluminum is used for forming the new stirrup bracket for Sanymetal shower and toilet compartments. Used for fastening toilet

compartments and shower stall partitions to the backing wall, the new material eliminates the need for maintenance of the metal bracket. The solid non-rusting aircraft-type alloy metal is tough and strong and will maintain its attractive polished finish for the life of the compartments. Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio.

For more details circle #121 on mailing card.

### Recessed Hinges Save Partition Space

Neater appearance without dangerous projections, reduced stacking depth when folded and easy handling are some of the advantages offered by use of the "Soss" concealed hinges in the Haws Aluminum Folding Partition. They are designed to meet the most extreme operating conditions and are completely concealed when the partition is extended. A maximum number of hinges are used in the partitions to ensure efficient operation for the life of the units. Robert Haws Co., 15722 Telegraph Road, Detroit 39, Mich.

For more details circle #122 on mailing card.

### Blue Bird Bus Has Hairflex Cushioning

A new cushioning material is used in the upholstered seats of Blue Bird school buses. Called Supreme Hairflex, the material sup-



ports the body without lumps or sags. It will withstand endless shock and does not shift from side to side. The rubber-locked animal curled hair material has a density which allows air to circulate through the material and carry off excess heat making seats cooler and more comfortable. It retains its resilience even when wet. Armour and Co., Alliance, Ohio.

For more details circle #123 on mailing card.

### Low-Cost Temperature Control for Individual Rooms

Zonvalve is a new thermostatically controlled valve designed for room control of temperature. The low-cost unit is made in all standard sizes and replaces the ordinary control valve on a radiator. Powered by an electric motor, it employs low-voltage wiring and operates automatically on steam and hot water heating systems. It is supplied as a complete package, ready for immediate installation. Heat-Timer Corp., 657 Broadway, New York 12.

For more details circle #124 on mailing card.

(Continued on page 154)



West Ridge School, Greece, N.Y. • Architect: Benedict Ade—Rochester  
Consulting Engineer: Robson & Woese, Inc.—Rochester

## thanks to a SPENCER VACUSLOT® system

Positive sanitation and economy of maintenance were planned into this modern new school.

A Spencer Vacuslot system, with vacuum producer and dirt separator in the utility room and piping to inlet valves throughout the building, makes possible quick, thorough cleaning.

For routine maintenance of corridors and classrooms, large dry mops are used to push dirt and litter to the Vacuslot, where powerful vacuum whisks it away. Dry mops are then vacuum cleaned simply by passing back and forth across the Vacuslot.

This versatile system is also used for conventional vacuum cleaning, eraser cleaning, water pick-up (in conjunction with a portable wet separator) and for boiler tube cleaning.

If you're interested in built-in, cost cutting convenience and the positive sanitation that only vacuum cleaning can provide, it will pay to check with Spencer.



Also  
manufacturers  
of a complete  
line of portable  
vacuum  
cleaners.



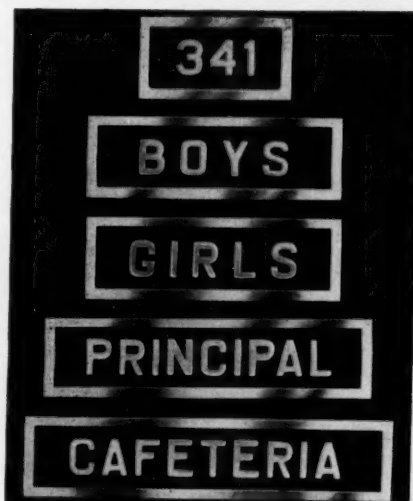
The **SPENCER**  
TURBINE COMPANY  
HARTFORD 6, CONNECTICUT

For Complete Information, Request  
• Descriptive Bulletin No. 153C  
• Showing of new 20 minute color movie.



See our catalog in  
**AMERICAN  
SCHOOL AND  
UNIVERSITY**  
or write for copy

**Raised Letter  
ALUMILITED ALUMINUM  
SIGNS AND DOOR NUMBERS**



Our Low Prices Will Surprise You!  
Ask For Our Style No. 870 "Enduro" SIGNS

**SPENCER INDUSTRIES**

1508 N. MASCHER ST.

PHILADELPHIA 22, PA.



**Classroom silencer**

Combine active, healthy children with modern, movable classroom furniture and teaching aids. You're sure to get scrape and screech—as well as education.

But add Bassick rubber-cushion glides (they are the best quality) to the above and the lack of chair-clatter will make you think you're back in the days of bolted-down chairs and desks.

Bassick rubber cushion glides slide silently and smoothly on broad, flat, polished and hardened steel bases. Protect furniture, protect floors against marking—even the newer asphalt tile floors. Try them on office furniture, too. **THE BASSICK COMPANY**, Bridgeport 5, Conn. In Canada: Belleville, Ont.

8.7



MAKING MORE KINDS OF CASTERS MAKING CASTERS DO MORE

*And Your School's  
Best Buy . . .*  
**in FOLDING TABLES  
is CLAPPER'S**



**They Combine the Finest  
Materials and Design For  
Modern, Functional Use**

More than any other table, Clapper's Folding Tables assure you of the finest in materials and workmanship. Commercial type, veneered formica tops are flush mounted to strong, precision-fitted frames. Patented, locking legs are heavy, enameled steel tubing. In all standard sizes—full 30" high, Clapper's Tables stay bright and sanitary longer—are available in widest range of colors to match any interior.

Other table equipment available.

Write for Illustrated Catalogue—FREE

**CLAPPER'S MANUFACTURING**

409 LINCOLN AVE.

MYERSDALE, PENNA.

"Clapper's Equipment Distributed Nationally"

*New* **HALVERSON All-Metal  
MAGAZINE-WORKBOOK DISPLAY RACK**

*New, Wider, Mid-Section  
for "Life-size" books*

30 pockets  
in 10 tiers

Functional  
tilt-back keeps  
copies erect

Wide, 11"  
mid-section for  
oversize books

Adjustable  
floor glides

High base for  
better view

45" high, 31"  
wide, 15" deep  
at base. Pockets  
7 1/2" h l g h  
(front), 11" high  
(back), 5/8" deep.



Holds up to  
**100**  
Periodicals  
at E-Z  
reading angle

**MODEL 30-PX**

**Only**

**\$44<sup>50</sup>**

with Adjustable Glides  
F.O.B. Chicago

with Ball Bearing  
Casters  
(2 locking)

**\$52<sup>00</sup>**

**Satisfaction  
Guaranteed**

Here's ideal E-Z SEE, SELECT and REPLACE convenient! Displays 30 titles, holds several of each, in less than half the area of a table. Saves space. Avoids torn covers, sorting, constant tidying up. All-steel finished in Gray Hammerloid baked enamel. Shipped completely set up—no screws or bolts to assemble.

**HALVERSON SPECIALTY SALES**

2027 W. North Avenue • Chicago 47, Illinois

Subsidiary of MIM-E-O STENCIL FILES COMPANY

## What's New ...



Fixed columns  
adjustable  
shelves

### Adjustable Height WALLMOUNTS

## Schooline® WARDROBE SYSTEMS

Solve the pupil wraps problem efficiently with Wallmount Coat and Hat Racks. Mount on any available wall space. Hat shelves and hanger bar adjustable on permanently attached columns to height for any age group. Double hat shelves and double row of spaced coat hooks accommodate 6 pupils per running foot. Basic 3' 2" or 4' 2" units interlock to make continuous racks to fit any space or capacity requirements.

### OTHER Schooline® UNITS



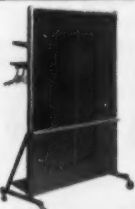
#### CHALKROBE®

Dual-purpose wardrobe-rack. Provides two 4 ft. hat shelves, 4 ft. Hook and Hanger rails for coats adjustable in height to all age groups. 4 ft. overshoe shelf. And, on other side a 50" x 48" chalkboard. Portable or stationary.



#### CORKROBE®

Identical to Chalkrobe but with pin-up cork board instead of "Chalkboard". These units permit complete flexibility in use of floor space. Can be anchored to floor, or wheeled about on casters. Hold wraps out of the way in orderly and efficient manner.



#### CLOSURE UNITS

With closure panels (as original equipment or add-on units) Chalkrobe and Corkrobe units serve as flexible room dividers, movable walls or screens. Widely used to enclose temporary class rooms, to "build" cloak rooms, meeting rooms, etc.



#### OVERSHOE RACKS

Matching units for Wallmount. Keep overshoes off-the-floor in an orderly manner.

Write for "Schooline" Catalog SL25

**VOGEL-PETERSON CO.**

1127 West 37th Street • Chicago 9, Illinois

### Drum Adaptor for King-Sized Vacuum

The Pullman Vacmobile in the standard size can be readily converted for heavy duty use with the new Pullman Drum Adaptor. A 700 per cent increase in the



amount of liquid or solid material that can be picked up by the Vacmobile is claimed when the new Drum Adaptor is used with any standard 55-gallon drum. Large areas of floor and wall space can now be cleaned without frequent emptying of the container.

The Drum Adaptor is put on any 55-gallon drum and the motor head and filter assembly from any Vacmobile is placed through the adaptor opening to prepare the unit for immediate heavy duty operation. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

For more details circle #125 on mailing card.

### Space-Saving Verti-File Now Available With Doors

Locking doors, for finished appearance and security, are now available on the new No. D-1375 Verti-Files. These vertical, space-saving files are available with one to seven security-type doors per section, with or without locks. Locks may be keyed alike or differently, depending upon the contents and uses. Verti-File doors are raised to slide out of sight and out of the way above each set of files.

The Deluxe Verti-File is designed to save floor space and equipment cost. Unlimited visibility is provided for quick reference and speedy filing. All sections are easily accessible and filing is done with minimum effort. Adjustable shelf



dividers keep material orderly. Verti-Files are available in starting sections and additional sections, either single-faced or double-faced, in gray baked-enamel. Deluxe Metal Furniture Co., Warren, Pa.

For more details circle #126 on mailing card.

(Continued on page 156)

## DON School Edition NEWS

### Did YOU get your copy of DON NEWS?

This Bargain Bulletin offers extra special values of Equipment, Supplies and Furnishings to schools. Worth getting—checking—acting on.

for example:

Genuine Melmac Plastic

#### COMPARTMENT TRAYS for your lunch room

6 compartments properly sized for vegetables, salad, entree, soup bowl, glass or cup and silver. Overall size 14" x 10" x 7/8". Replaces 4 or 5 separate pieces. Long lasting, easy to clean. Sanitary. Choice of five colors which add appetite appeal. 20% off regular price. Special

**\$18.75**  
DOZ.

In 6 doz. lots

To get your copy of this special issue of DON NEWS write today. Get acquainted with some of the 50,000 items DON sells—everything you need for your kitchen and lunch room. On everything, Satisfaction Guaranteed or your money back.

## EDWARD DON & COMPANY

GENERAL HEADQUARTERS—2201 S. LaSalle St.—Chicago 16, Ill.  
Branches in MIAMI • MINNEAPOLIS • ST. PAUL • PHILADELPHIA





Pictured below is the main hall of the "Exceptional Children's Unit" of the Starr King School, Carmichael, California. Exceptional and otherwise, school children everywhere are notoriously adept at tracking in dust and dirt. A maintenance problem? Not with Honeylite! Dust and dirt just fall through a Honeylite ceiling, because of Honeylite's open, all-aluminum honeycomb structure. And because it's all-aluminum, it's non-static - does not attract dust. And Honeylite's completely fire-proof - rated by Underwriter's Laboratories: flame spread-O; fuel contributed-not determined; smoke developed-negligible. Relamping (or removal for washing) is easy, too. Honeylite weighs only two to three ounces per square foot; doesn't need de-staticizing after handling. And light! Remember school hallways so dark they were comparable to walking into a movie on a sunny afternoon? Here, they even have an office right in the hall! Of course, Honeylite's characteristics are completely glare-free light (proved by actual test); nearly perfect transmitting efficiency; and light with high-noon visibility, yet as shadowless and cool as twilight. STARR KING SCHOOL, CARMICHAEL, CALIFORNIA - DREYFUS & BLACKFORD, ARCHITECTS & PLANNERS



**HONEYLITE®** the new look in halls of learning

LIGHT-DIFFUSING ALUMINUM HONEYCOMB

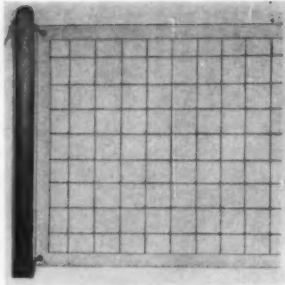
A DEVELOPMENT OF HEXCEL PRODUCTS INC.

951-51ST STREET, OAKLAND 8, CALIFORNIA

## What's New ...

### Duraco Vinyl Tile Is Especially Durable

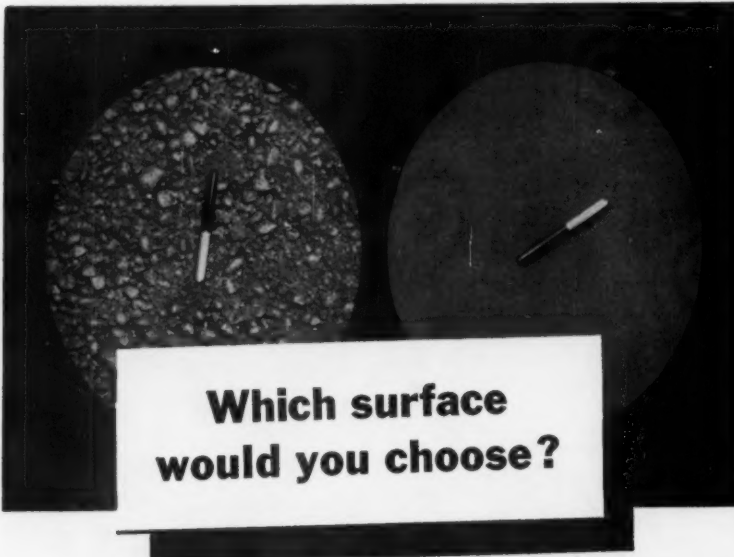
Asbestos fiber, inert filler and coloring pigment are bound together by a 100 per cent vinyl binder to form the new line of Azrock Duraco durable vinyl tile. The result of years of intensive research and development, Duraco is greaseproof, easy to keep clean, and requires no waxing. It is designed primarily for use in areas with heavy traffic. Duraco is available in five marble and five terrazzo patterns in nine by nine-inch size, 3/32 and 1/8 inch thicknesses. Azrock Products Div., Uvalde Rock Asphalt Co., Box 531, San Antonio, Texas. For more details circle #127 on mailing card.



**Linen Volleyball Net  
Is Stretchfree and Durable**

Freedom from stretching and outstanding durability are features of the new 32-foot linen seine twine volleyball net. Its knot-free linen construction and superior design features give the new net increased strength and longer life, yet it is economical in cost. Meshes are of identical shape and size, giving improved appearance.

The new 32-foot net is available in two styles, one with a steel cable and the other with a rope cable. It is made with tie strings to keep it supported in tension. The net is available in the Gold Medal and Invincible brands. The Linen Thread Co., Inc., 418 Grand Ave., Paterson 12, N.J. For more details circle #128 on mailing card.



**Which surface  
would you choose?**

HERE are close-up photographs of the actual surface of a typical playground before and after sealing with Walk-Top.® Notice the change from gritty, abrasive, coarse texture to a resilient, smooth and non-skid surface. Which surface would you choose for your play area? There isn't much doubt that you would select the Walk-Top surface . . . particularly when you discover how economically it can be applied over any existing paved area.



**Walk-Top smooth, all-weather surfaces give  
you more "play-days" per year.**

Get full details from our nearest office.



### American Bitumuls & Asphalt Company

200 Bush Street, San Francisco 20, Calif. • Perth Amboy, N. J. • Baltimore 3, Md.  
Mobile, Ala. • Cincinnati 38, Ohio • Columbus 15, Ohio • Tucson, Ariz.  
Seattle, Wash. • Baton Rouge 2, La. • St. Louis 17, Mo. • Inglewood, Calif.  
Oakland 1, Calif. • Portland 7, Ore. • Washington 5, D. C. • San Juan 23, P. R.

### Portable Adding Machine Is Low-Priced Unit

The new Ajax Model 605 is a low-priced portable adding machine with a direct subtraction feature. The hand-operated machine has a listing capacity of five figures and a totaling capacity of six figures. The versatile new model permits adding, listing, subtracting and multiplication with visible answer dials presenting an accumulated total figure at all times without any machine operation. The machine is designed for speed and accu-



racy with ease and convenience for the operator. R. C. Allen Business Machines, Inc., 678 Front Ave., N.W., Grand Rapids, Mich.

For more details circle #129 on mailing card.

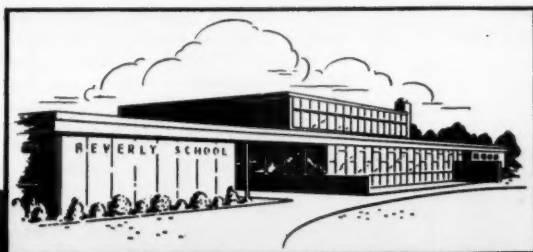
### Hot Food Vendor Has 70-Can Capacity

A new model of the hot food vendor for Campbell soups and other food products is now available with a 70-can capacity. The VS-7 is thermostatically controlled to serve food piping hot. It is designed to fit virtually all locations and is powered by 110-115 volts with an improved, long-life motor. Food is served at about 150 degrees.

An automatic spoon dispenser is connected electrically to the vending mechanism, dispensing a spoon with each individual can. The new unit can be equipped with either multiple or single pricing mechanism which accepts nickels, dimes and quarters. The VS-7 is of all-steel construction with a silver-gray hammer-tone baked enamel finish, Fiberglass insulated. It provides a quick and efficient hot food source for students, teachers or visitors when the kitchen is not in operation. Fedam Company, River Grove, Ill.

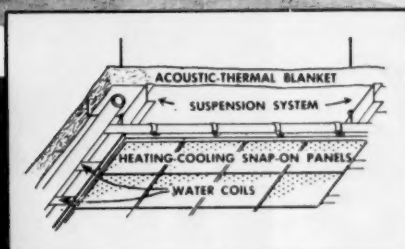
For more details circle #130 on mailing card.

(Continued on page 158)



**THERE IS NO OTHER  
Conditioning System  
Offering So Many Advantages  
for School Buildings!**

The  
**BURGESS-MANNING**  
Radiant Acoustical  
Ceiling



**The Only Completely Integrated  
Radiant Heating, Cooling  
and Acoustical Ceiling**

This ceiling that sets a new high standard for human comfort conditioning with its Radiant Heating, (Cooling, too, if desired) and Acoustical Control, offers so many more advantages of design, construction and maintenance as to put it beyond comparison.

No other heating method allows so much freedom in architectural design—no other system occupies so little costly building space.

None has lower initial accommodation costs—and none requires as little mechanical maintenance.

Because of the metal-to-metal direct contact between heating coil and radiant panel, energy input is utilized with a high degree of efficiency and consequent fuel saving.

Add to these advantages the superiority of Radiant Heating with its lack of drafts, instant response to thermostatic control without lag or over-run, the effective acoustical control provided for in this same integrated unit and you have ample reason to specify Burgess-Manning Radiant Acoustical Ceilings for your new school buildings.

*Remember*  
**Your Building is Better  
Your Building Budget No Bigger**

Write for Descriptive  
Burgess-Manning Catalog No. 138-2N

**BURGESS-MANNING COMPANY**

*Architectural Products Division*  
5970 Northwest Highway, Chicago 31, Ill.





## What's New ...

### Choir Robe Fabric Is Colorfast

Developed especially for making choir robes, the No. 53 Broadmoor is a colorfast fabric. A unique solution dye process is used to build color into the cellulosic acetate fibers to ensure constant freshness and protect the material from fading. The special twist of threads gives the material a soft glow which is retained even after storage. It does not mildew and requires less frequent cleaning. Broadmoor is soft and lightweight, resistant to soiling, does not rustle and drapes effectively. It is available in twelve colors to meet the needs of all choral groups. E. R. Moore Co., 932 Dakin St., Chicago 13.

For more details circle #131 on mailing card.

### Small, Compact Vacuum Has High Power at Low Cost



The readily mobile, small, compact Lightning vacuum cleaner is designed to

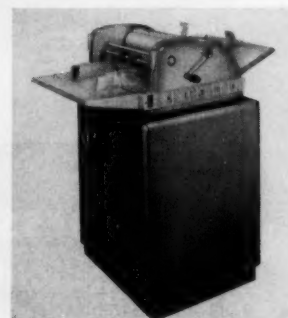
give commercial cleaning capacities at low cost. It is light in weight, yet provides the necessary cleaning power. The Lightning has a self-cleaning orlon filter and disposable paper filter bags. The aluminum housing has baked-on hammerloid finish and a non-marking rubber bumper protects walls and furniture. The machine is designed for either wet or dry pick-up and rolls smoothly on three-inch ball bearing casters. It is equipped with all accessories and is 24½ inches high and 18 inches wide.

The Kent Co., Inc., Rome, N.Y.

For more details circle #132 on mailing card.

### Direct Process Duplicator Is Hand-Operated

The new 18D-60 is a hand-operated direct process liquid duplicator with all the advanced features of the electric models, except for the electric drive. The new engineering and operating features permit increased versatility and adaptability for general duplication and simple systems use. The 18-inch drum permits duplicating large drawings and forms up to 18 by 14



inches in size, yet it will handle 3 by 5-inch forms. The 18D-60 is new from feed tray to receiving tray. Ditto, Incorporated, 6800 McCormick Rd., Chicago 45.

For more details circle #133 on mailing card.

## Locker Lock Problems?

Lockers protected with Dudley Combination Master-keyed Locks are really safe.



RD-2

Solid stainless steel case, revolving dial with 64,000 possible 3-number combinations. Self-locking when shackle is pushed home.



### On the Basketball Court ...

while dribbling and passing and making lightning shots to the basket, pupils want to know that valued belongings in school or gymnasium lockers are completely safe from pilferage. Belongings are *always* safe with Dudley Locker Locks. Should combinations be forgotten or require changing, the Dudley Master Key is instantly available. Only authorized officials can open the personal lockers of school pupils whether in class or on the squad.

Ask your Dudley representative. He's there to help you—without obligation, of course.



S-540 Master-Keyed  
Built-in Lock

Fits all locker piercings. Quick combination change with special reset key.



The DUDLEY  
Master Key

Can't be duplicated on ordinary key making machines.

# DUDLEY LOCK CORPORATION

Dept. 210, Crystal Lake, Illinois

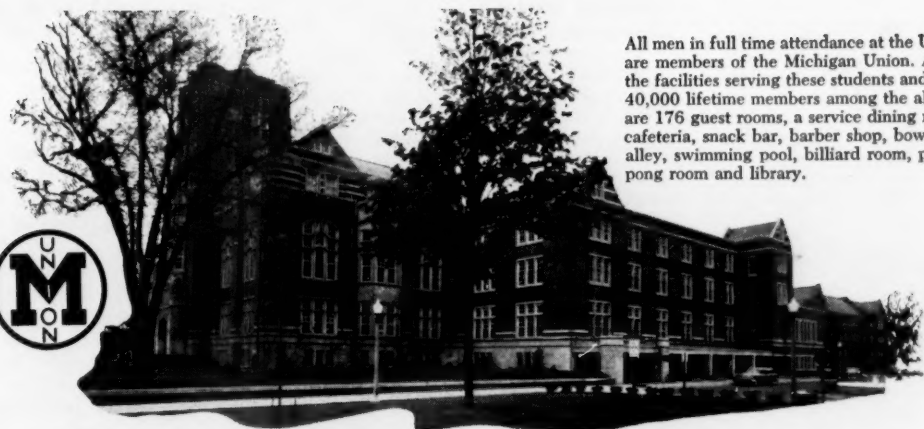
### Odorless Interior Paint Is Fast-Drying

Merplax is a new development in acrylic-vinyl latex paint for interior use. The result of months of intensive research, the new paint is odorless, requires no thinner, is self-priming, with excellent hiding qualities, and dries in thirty minutes. Classrooms can thus be painted and ready for use almost as soon as the painters are out.

The new Merplax paint can be applied by brush, roller or spray gun and spots can be touched up as it does not streak and applies evenly. Paint brushes and rollers used to apply Merplax can be thoroughly cleaned immediately after use by rinsing in warm water, yet the paint has excellent washability. Merplax can be used on new or painted plaster, woodwork, wallboard, interior brick and other masonry surfaces, and wall papers. It is available in a variety of decorator colors. The M. J. Merkin Paint Co., 1441 Broadway, New York 18.

For more details circle #134 on mailing card.

(Continued on page 160)



All men in full time attendance at the University are members of the Michigan Union. Among the facilities serving these students and over 40,000 lifetime members among the alumni are 176 guest rooms, a service dining room, cafeteria, snack bar, barber shop, bowling alley, swimming pool, billiard room, ping pong room and library.

## The University of Michigan Union chooses *Libbey Heat-Treated Safedge Glassware*



THE SNACK BAR at the recently completed \$2 million addition to the Michigan Union seats 400. For beverages and self-service water in the new Snack Bar as in the Union's Cafeteria and main Dining Room, Libbey Heat-Treated Safedge Glassware, decorated with the Michigan Union Crest, was selected exclusively.

This amazingly durable glassware is extremely resistant to the hard treatment resulting from self-service, and to scratching frequently encountered during washing and sterilizing. Its durability is further assured by the famous Libbey guarantee: "A new

glass if the rim of a Libbey 'Safedge' glass ever chips." The special Michigan Union crest personalizes each glass and adds distinction to the service.

Libbey's complete line provides attractive, durable glassware for every use. Its economy in operation has been proved in leading dining places across the country. Whatever your glassware requirements, whether large or small, you can rely on Libbey for the utmost satisfaction.

See your Libbey Supply Dealer now, or write to Libbey Glass, Division of Owens-Illinois, Toledo 1, Ohio.



Water Glass  
HT 610, 9½-oz.

The snack bar at  
the Michigan Union



LIBBEY SAFEDGE GLASSWARE  
AN **®** PRODUCT

OWENS-ILLINOIS  
GENERAL OFFICES • TOLEDO 1, OHIO

## What's New ...



### Low-Cost Stapler Incorporates Staple Remover

The new Swingline No. 101 Staple Gun is a streamlined, compact, high compression stapler with a built-in staple remover. The compact unit is low in price, yet sturdy and efficient in operation. It has a pile driving action which drives staples deeply into wood, plaster, plastic and other materials, yet it is light in weight and highly maneuverable. The indestructible steel construction is case hardened for long wear, all painted parts are bond-erized and no oiling is required. The handle locks securely closed when not in use and the gun uses both 4/16 inch and 5/16 inch staples. It is available in

gray, green and red finish. Swingline Inc., 32-00 Skillman Ave., Long Island City 1, N.Y.

For more details circle #135 on mailing card.

### Storage Water Heaters Ensure Adequate Hot Water

The new Rheem line of boosters and high capacity storage water heaters is designed to ensure plenty of hot water for laboratories, gymnasiums and wash-rooms. Available in capacities of 45 and 75 gallons, the line is approved by AGA for 180-degree water and has two input ratings for each size. The new booster supplies hot water quickly and efficiently. Features of the new line include heavy duty galvanized storage tank, fiberglass insulation, automatic high temperature cut-off, and remote control where desired. Rheem Mfg. Co., 7600 S. Kedzie Ave., Chicago 29.

For more details circle #136 on mailing card.

## SHELDON

Builder of Sheldon Lathes, Milling Machines, Shapers and Sebastian Lathes

**It only takes  
one good  
Milling Machine  
and a capable  
Shaper to triple  
the value of your  
shop course**



No course in shop practice can be complete without basic instruction on the milling machine and the shaper.

For this no other units equal the size "0" Sheldon Milling Machine with its hand and power table feed, quick-change gear box, variable speed drive, back geared unit, and interchangeable vertical milling head attachment. No other shaper is better suited for class work than the ample size Sheldon 12" Back Geared Shaper with its large capacity, long stroke, variable speed drive, weight and accuracy.

These are standard machine tools with which you can teach modern methods and tool performance—full powered industrial tools that can give your students the "feel" experience and satisfaction of adult work.

Sheldon provides today's modern school shop with "up-to-date" machine tools . . . with 10", 11", and 13" Precision lathes for both industrial arts and vocational programs . . . Sheldon Milling Machines . . . Sheldon Shapers . . . and, for advanced courses, Sebastian 13" and 15" Geared Head Lathes.

#### BASIC TEACHING AIDS

In addition to providing conveniently located distributors with experienced sales engineers, Sheldon prepares and publishes basic teaching aids, for shop instructors.

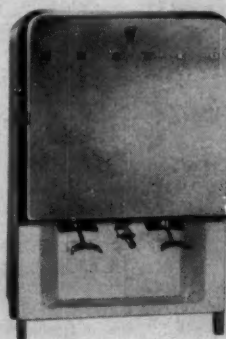
Write for samples today—

**SHELDON MACHINE CO., INC.**  
4266 N. Knox Ave., Chicago 41, Ill.



### Premiere Milk Dispensers of Steel and Plastic

Stainless steel is used to construct the new Premiere line of milk dispensers. The entire milk-splash area is formed of one sheet of glass-smooth U.S. Royalite. This thermo-plastic material is odorless, easy to



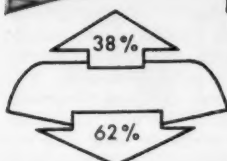
clean and highly resistant to heat, grease and chemicals. The panel easily snaps in and out for cleaning and for access to temperature control or valve assemblies.

The new dispensers are the result of seven years of study and research. Five compact models are available, offering a choice of size and capacity for every need. All units meet all 3-A standard requirements when used with standard dispenser cans. Models include one, two and three-can units, and one and two-can models with the Creamador for a three-quart creamer with separate valve assembly. All milk is kept under constant, safe refrigeration in the dispensers and all models have a dripproof valve designed to divert the condensate from glass or cup. The unit is easily disassembled for cleaning. All refrigeration service is from the front and all openings to the refrigeration compartment are screened to prevent entrance of foreign matter. Glass positioners reduce the danger of breakage. United Refrigerator Co., Hudson, Wis.

For more details circle #137 on mailing card.

(Continued on page 162)





# DAYSTAR

## A NEW DIRECT--INDIRECT LUMINAIRE

Now Lighting Products Inc., pacesetter to the lighting industry, presents **DAYSTAR** a revolutionary new luminaire designed for better lighting in class rooms, offices, commercial and industrial areas . . . wherever high levels of quality illumination are desired.

The New **DAYSTAR** is available in 48 and 96 inch length with 35° crosswise and 25° or 45° lengthwise shielding. 62% of the light is directed down and 38% up.

The side panels are of steel or plastic. The steel panels are permanently attached. The polystyrene plastic panels are readily removable without the use of tools. Eight foot units utilize both side panels and louvers that give an uninterrupted continuity of design. Louvers have a special snap-in catch and are suspended from the channel by safety chains for ease of relamping and maintenance. All metal parts are finished in high reflectance baked white enamel over a phosphatized surface.

The New **DAYSTAR** is completely described and illustrated in color bulletin No. 1503.

### MAIL COUPON TODAY!

LIGHTING PRODUCTS INC.		No. 1503
Dept. 9-B, Highland Park, Ill.		
Name _____	Title _____	
Company _____		
Address _____	City _____	State _____



**LIGHTING PRODUCTS INC., Highland Park, Illinois**

## What's New ...

### Literature and Services

• Specifications, capacities, dimensions and other details on mechanical folding bleachers are contained in a new **Bleacher Catalog** just issued by Berlin Chapman Company, Berlin, Wis. Data on mechanical folding chair stands and studio seating are also included.

For more details circle #138 on mailing card.

• **Catalog 58-G** on the comprehensive line of rolled, figured and wired glass manufactured by the Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo., is now available from the company. A special section describes the application of Mississippi glass patterns in the modern school.

Also included are pattern characteristics, light transmission data and other details of interest to administrators, school boards and architects.

For more details circle #139 on mailing card.

• Photographs and diagrammatic drawings illustrate the new 28-page booklet on **Fenestra Intermediate Steel Windows**. Detailed information is included on the four styles available: projected, awning, casement and combination. Technical information is presented and a double gate-fold center spread gives a comprehensive guide to window types and sizes. The catalog is available from Fenestra Incorporated, 2250 E. Grand Blvd., Detroit 11, Mich.

For more details circle #140 on mailing card.

• "**Foundation for Effective Audio-Visual Projection**" is the title of a new pamphlet prepared by Eastman Kodak Co., Rochester 4, N.Y. The 20-page illustrated booklet is especially designed for the person who uses audio-visual equipment regularly, but will be helpful to anyone using the medium. Sections in the booklet discuss room facilities, seating plan and screen size and type, loud speaker location, projector location and projector distance.

For more details circle #141 on mailing card.

• An attractive color guide for the selection of combinations of colors and laminated plastic patterns for Herman Nelson Unit Ventilator products is offered in **Bulletin 600-E3A** by American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky. Seven true color paint samples for school unit ventilators and cabinets are included, together with recommended color combinations and the reflective factor of each color. Five full color samples of Formica laminated plastic for top surfaces are also shown.

For more details circle #142 on mailing card.

• All six vacuum cleaners in the new line of **Clarke heavy duty, wet-dry units** introduced by Clarke Sander Machine Co., Muskegon, Mich., are described in a new brochure recently released. The many new features incorporated into the line are discussed and several of the efficiency features are shown in close-up photographs. Other illustrations show the units in use for the numerous cleaning jobs performed by the versatile line.

For more details circle #143 on mailing card.

• "The New Duo-Washfountains" described as "the greatest advance in modern sanitary wash fixtures," are presented in **Bulletin K-1204** released by Bradley Washfountain Co., Milwaukee 1, Wis. Words and pictures are used to present the new features of the unit. These include easy wall mounting, floor clearance and the wide hinged foot-treadle for control of the water supply.

For more details circle #144 on mailing card.

• A cleaning and maintenance handbook is available without cost from Advance Floor Machine Co., 4100 Washington Ave. N., Minneapolis 12, Minn. Entitled "**How to Use Measured Work Techniques to Reduce Cleaning and Maintenance Costs**," the 28-page illustrated handbook was written by a methods engineering firm and tells how to reduce labor costs in cleaning and maintenance operations through the use of measured work studies. Subjects covered include job time requirements, time study, work loads, cleaning costs, work schedules, proper equipment and consideration of maintenance problems when planning new construction.

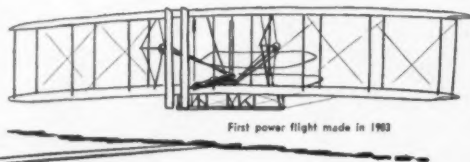
For more details circle #145 on mailing card.

• **Catalog No. 58** is a 52-page booklet covering the full line of Craftool tools, equipment and furniture for ceramic and graphic arts shops. Designed especially for schools, teachers and craftsmen, the new catalog presents descriptive text and illustrations of the many items of tools and equipment available from Craftools, Inc., 396 Broadway, New York 13.

For more details circle #146 on mailing card.

(Continued on page 164)

When the Wright Brothers made their first aeroplane flight, HERRICK refrigerators were already famous for keeping foods flavor-fresh.



First power flight made in 1903

# HERRICK

Standard of all Comparison

## STAINLESS STEEL\* REFRIGERATORS

**Provide the ultimate in  
MODERN FOOD PRESERVATION  
backed by 66 years of  
pioneering leadership**

When you buy HERRICK, you get the benefits of over half a century's experience in properly refrigerating foods. Highest quality materials, modern scientific design and fine craftsmanship combine to bring you lasting satisfaction. HERRICK provides complete food conditioning with just the right temperature and proper humidity to maintain peak freshness and flavor. You'll find HERRICK costs less by the year as the years go by. See HERRICK.



HERRICK Model RS566  
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\*Also available with white enamel finish

**SPECIFY HERRICK FOR MORE  
REAL VALUE PER DOLLAR**



Refrigerators



Freezers



Walk-In Coolers

**These HERRICK features mean  
longer, trouble-free service**

**Oversize Cooling Coil**—Assures fast recovery, uniform temperatures.

**Ball-Bearing Hinges**—Work easily . . . wear longer. Chrome-plated brass.

**Super-Efficient Insulation**—Semi-rigid Fiberglas, 2½-lb. density.

**Adjustable Shelves**—Easily changed to fit any specific need.

**Automatic Slam-Shut Door Latches**—Open effortlessly, close solidly.

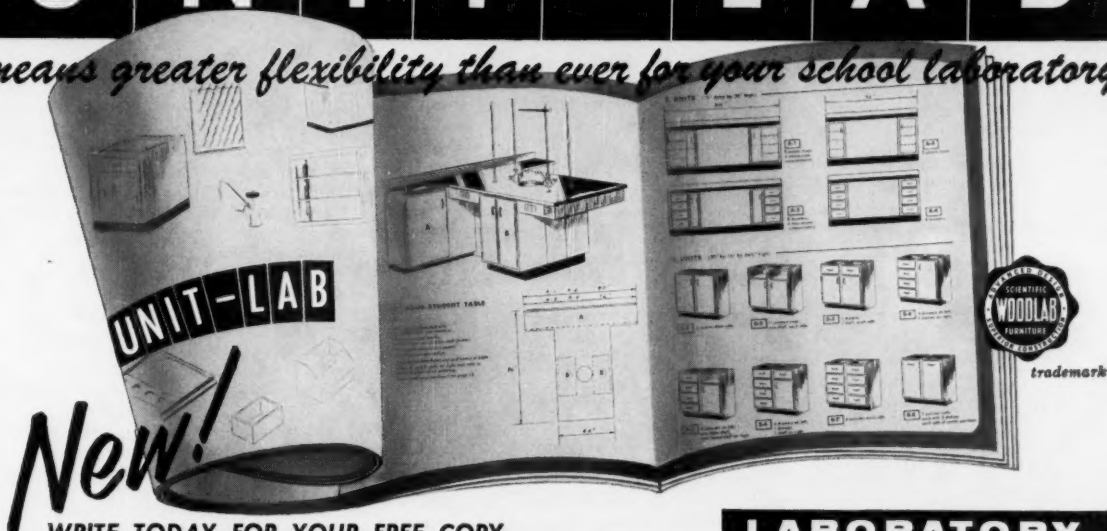
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**HERRICK REFRIGERATOR COMPANY** Waterloo, Iowa  
WRITE DEPT. N FOR NAME OF NEAREST HERRICK SUPPLIER

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**COMPLETE CATALOG OF WOODLAB EQUIPMENT**

**LABORATORY**

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**COMPANY, INC.**

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comes this superior *New* chalkboard

## PERMASTEEL

A porcelain enamel chalkboard consisting of a hard vitreous material fused, at controlled heat of 1500° F. into 18 gauge enameling sheet steel in accordance with Performance Specifications for Porcelain Enamel Chalkboards.

PERMASTEEL Chalkboard has a surface that is textured to give the right "bite" for excellent chalk marking. The surface is colored in Rowles scientifically prepared See-GREEN for easy reading and minimum eyestrain. See-GREEN will not shine or fade, even after years of use. PERMASTEEL erases clean and is easy to maintain as only periodic washing is required. The writing surface is rock-hard and resists wear, shock and abrasion; will not crack, dent or shatter under normal classroom use.

Magnets can be used to hang papers on PERMASTEEL.

### ROWLES TRIM for Perfect Installations—

Rowles aluminum trim and chalk troughs are attractively styled and are designed to help simplify chalkboard installation. All Rowles moldings have a satin anodized finish.

See the complete line of Rowles School Classroom Equipment at A. A. S. A. Regional Meetings

St. Louis..... Booth G9-11 1  
San Francisco..... Booth 432-433  
Cleveland..... Booth C77-79

For further information, see your nearest Rowles Dealer or write

**E. W. A. ROWLES CO. School Equipment**  
106 N. Hickory St. • Arlington Heights, Illinois

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Popular 5-tube super-het radio project. Thousands used in shop training. Teaches radio construction. Complete with cabinet.

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### NEW knight Dual-Speed Push-Button Automatic Tape Recorder

Judged "Best Buy" among recording experts and educators. Features push-button keys for instant recording, playback, rewind, stop or fast forward operation. Renowned for faithful reproduction. Has 2-speed (7 1/2" and 3 3/4" per second) dual-track recording mechanism and efficient erase system. Records up to 3 hours on a single tape. Hum-free transistorized preamplifier; quality 3-watt amplifier; 4 x 6" speaker; dual neon-glow level indicators; tone control; safety interlock to prevent accidental erasing. Simple to operate. Attractive portable case. Complete with microphone. 5" reel of tape and take-up reel. Shpg. wt., 29 lbs.

91 RZ 751 KNIGHT Recorder, only \$94.95

### FREE 404 PAGE 1958 CATALOG

Send for the leading buying guide to everything in electronics for the school: sound and recording equipment; KNIGHT-KITS for training; Lab instruments, tools, books, electronic parts. Write for FREE copy today.

**ALLIED RADIO**  
100 N. Western Ave., Dept. 10-88  
Chicago 80, Ill.



## What's New...

• "Pittsburgh Fluorescent Equipment" is the title of a new eight-page bulletin prepared by Pittsburgh Reflector Co., 476 Oliver Bldg., Pittsburgh 22, Pa. Designated **Bulletin Z**, it gives a comprehensive story on the new complete line of recessed modular light units introduced by the company, with detailed specifications, dimensional data, photographs, tables and drawings providing information on the lighting units in the line.

For more details circle #147 on mailing card.

• Chalkboard care is the subject of a new service offered by Weber Costello Co., Chicago Heights, Ill. An amusing character, Chalkboard Charlie, is pictured on the

cover of the new folder containing helpful information on chalkboard use and care. The folder is a part of the program which is designed to answer specific questions on chalkboard care, in addition to the material contained in the folder.

For more details circle #148 on mailing card.

• Catalog No. 93A gives factual information about hinge location, finishes, door frequency, bearings and the various types of hinges and their uses. Prepared by McKinney Mfg. Co., 1715 Liverpool St., Pittsburgh 33, Pa., the illustrated booklet also contains information on U.S. Government specifications.

For more details circle #149 on mailing card.

• Erie Porcelain Enamel Curtain Wall and Veneer Panels are the subjects of a new 16-page catalog available from the Erie Enameling Co., Erie, Pa. Specifications, case histories and diagrammatic drawings of details are included.

For more details circle #150 on mailing card.

### Film Releases

"High School Prom," 1½ reel guidance film; "English Literature: The Elizabethan Period," 1¼ reels; "English Literature: The Eighteenth Century," 1¼ reels; "Story of Our Number System," 1 reel; "The Panama Canal," 1 reel; "The West Indies: Geography of the Americas," 1 reel, and "Living and Non-Living Things," 1 reel, all sound films, color or black and white. Coronet Films, 65 E. South Water St., Chicago 1.

For more details circle #151 on mailing card.

"Insects Around Us," five filmstrips in color. "Asiatic Lands and People," five filmstrips in color covering Japan, Pakistan, Burma, Thailand and Malaya. The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich.

For more details circle #152 on mailing card.

"Our Friend the Atom," 16mm 50 minute color film in "Science-Factual Series." Walt Disney Productions, 2400 W. Alameda Ave., Burbank, Calif.

For more details circle #153 on mailing card.

"North American Partners: U.S., Canada, Mexico," 56 black and white frames, and "Keystone of European Unity," 53 black and white frames, both 35mm filmstrips, with discussion manuals. Office of Educational Activities, The New York Times, 339 W. 43rd St., New York 36.

For more details circle #154 on mailing card.

### Suppliers' News

Formica Corporation, Cincinnati, Ohio, a subsidiary of American Cyanamid, recently introduced Formica Chalkboard materials. The company now announces the appointment of New York Silicate Book Slate Co., 541 Lexington Ave., New York 22, and E. W. A. Rowles Co., 4 N. Hickory St., Arlington Heights, Ill., as distributor-manufacturers of the new Formica Chalkboard materials.

T & S Brass & Bronze Works, Inc., manufacturer of water dispensing units, announces the opening of its new plant and executive offices at 128 Magnolia Ave., Westbury, L.I., N.Y.

Victory Metal Mfg. Corp., Plymouth Meeting, Pa., manufacturer of the Vimco, Stakold and Sno-Queen lines of refrigerators, announces the opening of a new and modern research laboratory adjacent to the modern plant opened two years ago.

Welbilt Corporation, 57-18 Flushing Ave., Maspeth 78, N.Y., manufacturer of gas and electric ranges and air conditioners, announces the opening of its new Garland manufacturing plant providing advanced production methods for producing commercial cooking equipment. Complete manufacturing operations for Garland cooking equipment were moved to the new plant from Detroit.

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When, in either an advertisement or "What's New" you locate the product, turn to the index to advertisements on the following page or to the index of "What's New" items (left) where you will find the key number for the item. Items advertised are listed alphabetically by manufacturer. "What's New" items are in Key Number order. Circle the corresponding key number on the card below for each item in which you are interested. The second card is for the use of someone else who may also want product data.



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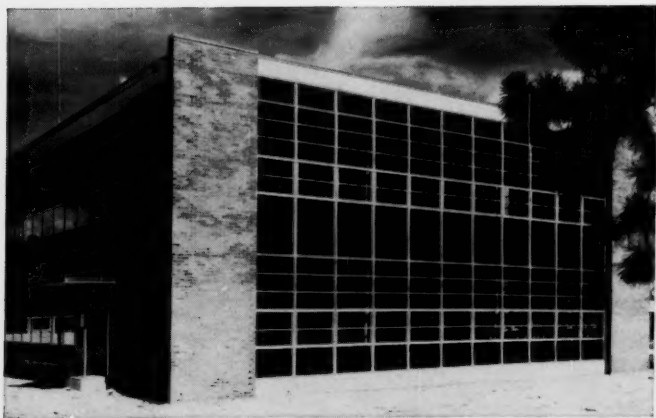
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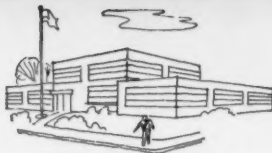
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